

1895

1923

CITY OF NEW YORK

New York Zoological Society

Founded in 1895 for the establishment of the Zoological Park; conservation of the animal life of the world--fishes, mammals, birds; promotion of zoology through exploration and publication; and, in 1900, the direction of the New York Aquarium in Battery Park



TWENTY-EIGHTH ANNUAL REPORT

Address: Director Wm. T. Hornaday, Zoological Society at the Zoological Park, 183d Street and Southern Boulevard; Director Charles H. Townsend at the Aquarium, Battery Park; Secretary of the Society at the Society offices, 101 Park Ave.

PUBLISHED AT THE OFFICE OF THE SOCIETY, 101 PARK AVENUE

JANUARY, 1924

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TWENTY-EIGHTH ANNUAL REPORT

OF THE

New York Zoological Society



SABLE ANTELOPE

One of the attractive exhibits in the Antelope House.
Photograph by Elwin R. Sanborn.

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JANUARY, 1924

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THE NEW YORK ZOOLOGICAL SOCIETY

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PRINTERS
NEW YORK

TWENTY-EIGHTH ANNUAL REPORT

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New York Zoological Society

Form of Bequest

I do hereby give and bequeath to the "NEW YORK ZOOLOGICAL SOCIETY," of the City of New York,-----

Membership

Membership.—Membership in the Zoological Society is open to all who are interested in the objects of the organization and desire to contribute toward its support.

Classes.—Annual Membership is \$10. This entitles the holder to admission to the Zoological Park on pay days, when the collections may be seen to the best advantage, all publications of the Society, privileges of the Administration Building, lectures, special exhibitions, and ten complimentary tickets to the Zoological Park for distribution.

Annual Members may become Life Members by the payment of \$200; a subscriber of \$1,000 becomes a Patron; \$2,500, an Associate Founder; \$5,000, a Founder; \$10,000, a Founder in Perpetuity, and \$25,000 a Benefactor.

Address the SECRETARY OF THE ZOOLOGICAL SOCIETY,
101 Park Avenue, New York City.

Board of Managers

Ex-officio: { THE MAYOR, *of the City of New York.*
{ THE PRESIDENT, *Dep't of Parks, City of New York.*

CLASS OF 1925

PERCY R. PYNE,	FREDERICK C. WALCOTT,
GEORGE BIRD GRINNELL,	BEEKMAN WINTHROP,
CLEVELAND H. DODGE,	GEORGE C. CLARK, JR.,
C. LEDYARD BLAIR,	W. REDMOND CROSS,
ANTHONY R. KUSER,	HENRY FAIRFIELD OSBORN, JR.,
MORTIMER L. SCHIFF,	ARTHUR A. FOWLER.

CLASS OF 1926

HENRY FAIRFIELD OSBORN,	EDWARD S. HARKNESS,
LISPENARD STEWART,	WILLIAM B. OSGOOD FIELD,
CHARLES F. DIETERICH,	EDWIN THORNE,
GEORGE F. BAKER,	PERCY A. ROCKEFELLER,
WM. PIERSON HAMILTON,	JOHN E. BERWIND,
ROBERT S. BREWSTER,	IRVING K. TAYLOR.

CLASS OF 1927

MADISON GRANT,	GEORGE D. PRATT,
WILLIAM WHITE NILES,	T. COLEMAN DU PONT,
FRANK K. STURGIS,	HENRY D. WHITON,
OGDEN MILLS,	CORNELIUS R. AGNEW,
LEWIS RUTHERFORD MORRIS,	HARRISON WILLIAMS,
ARCHER M. HUNTINGTON,	MARSHALL FIELD.

Officers of the Society

Honorary President:

HENRY FAIRFIELD OSBORN.

First Vice-President:
MADISON GRANT.

Second Vice-President:
FRANK K. STURGIS.

Secretary: MADISON GRANT, 101 Park Avenue

Treasurer: CORNELIUS R. AGNEW, 16 William Street.

Assistant Treasurer: THE FARMERS' LOAN & TRUST COMPANY.

Executive Committee

MADISON GRANT, *Chairman*

PERCY R. PYNE,

HARRISON WILLIAMS,

WM. WHITE NILES,

HENRY D. WHITON,

FRANK K. STURGIS,

GEORGE D. PRATT,

ANTHONY R. KUSER,

HENRY FAIRFIELD OSBORN, JR.,

CORNELIUS R. AGNEW, *Ex-Officio.*

General Officers

WILLIAM T. HORNADAY, *Director, Zoological Park.*

W. REID BLAIR, D.V.S., *Ass't. to the Director.*

CHARLES H. TOWNSEND, *Director, New York Aquarium.*

GEORGE S. HUNTINGTON, *Prosecutor.*

H. DE B. PARSONS, *Consulting Engineer.*

R. L. CERERO, *Bursar.*

Pension Board

LEWIS RUTHERFURD MORRIS, *Chairman*

CORNELIUS R. AGNEW, *Treasurer.*

HERMANN W. MERKEL, *Secretary.*

WM. B. OSGOOD FIELD,

GEORGE BIRD GRINNELL,

H. R. MITCHELL,

WM. REDMOND CROSS,

W. REID BLAIR,

CHARLES H. TOWNSEND.

Committees of the Society

Auditing Committee

WM. WHITE NILES, *Chairman.*

GEORGE C. CLARK, JR., WM. REDMOND CROSS,
MADISON GRANT, *Ex-Officio.*

Aquarium Alteration Committee

FRANK K. STURGIS, *Chairman.*

HENRY D. WHITON, CHARLES H. TOWNSEND,
MADISON GRANT, *Ex-Officio.*

Art Committee

FRANK K. STURGIS.

Editorial Committee

MADISON GRANT, *Chairman.*

WILLIAM T. HORNADAY, WILLIAM BEEBE,
CHARLES H. TOWNSEND, ELWIN R. SANBORN, *Secretary.*

Aquarium Committee

CHARLES H. TOWNSEND, *Chairman.*

CHARLES L. BRISTOL, JOHN T. NICHOLS,
BASHFORD DEAN, E. W. GUDGER. G. K. NOBLE,

Finance Committee

FRANK K. STURGIS, *Chairman.*

GEORGE C. CLARK, JR., PERCY R. PYNE,
CORNELIUS R. AGNEW, *Ex-Officio.*

Nominating Committee for Officers and Committees

LEWIS RUTHERFURD MORRIS, *Chairman.*

GEORGE C. CLARK, JR.,

GEORGE BIRD GRINNELL.

Nominating Committee for Board of Managers

CHARLES DE RAHM, *Chairman.*

H. DE B. PARSONS,

C. A. DANA.

Publicity Committee

RAYMOND L. DITMARS, *Chairman.*

W. REID BLAIR,

CHARLES H. TOWNSEND,

ELWIN R. SANBORN,

W. T. HORNADAY, *Ex-Officio.*

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OGDEN MILLS, *Chairman.*

HENRY D. WHITON, *Vice-Chairman.*

W. REDMOND CROSS, *Secretary.*

MORTIMER L. SCHIFF,

IRVING K. TAYLOR,

ARTHUR A. FOWLER,

HENRY FAIRFIELD OSBORN, JR.

CORNELIUS R. AGNEW, *Ex-Officio.*

Membership Committee

HENRY FAIRFIELD OSBORN, JR., *Chairman.*

F. TRUBEE DAVISON,

ARTHUR A. FOWLER,

GEORGE P. PUTNAM.

Executive Staff

Officers of the Zoological Park

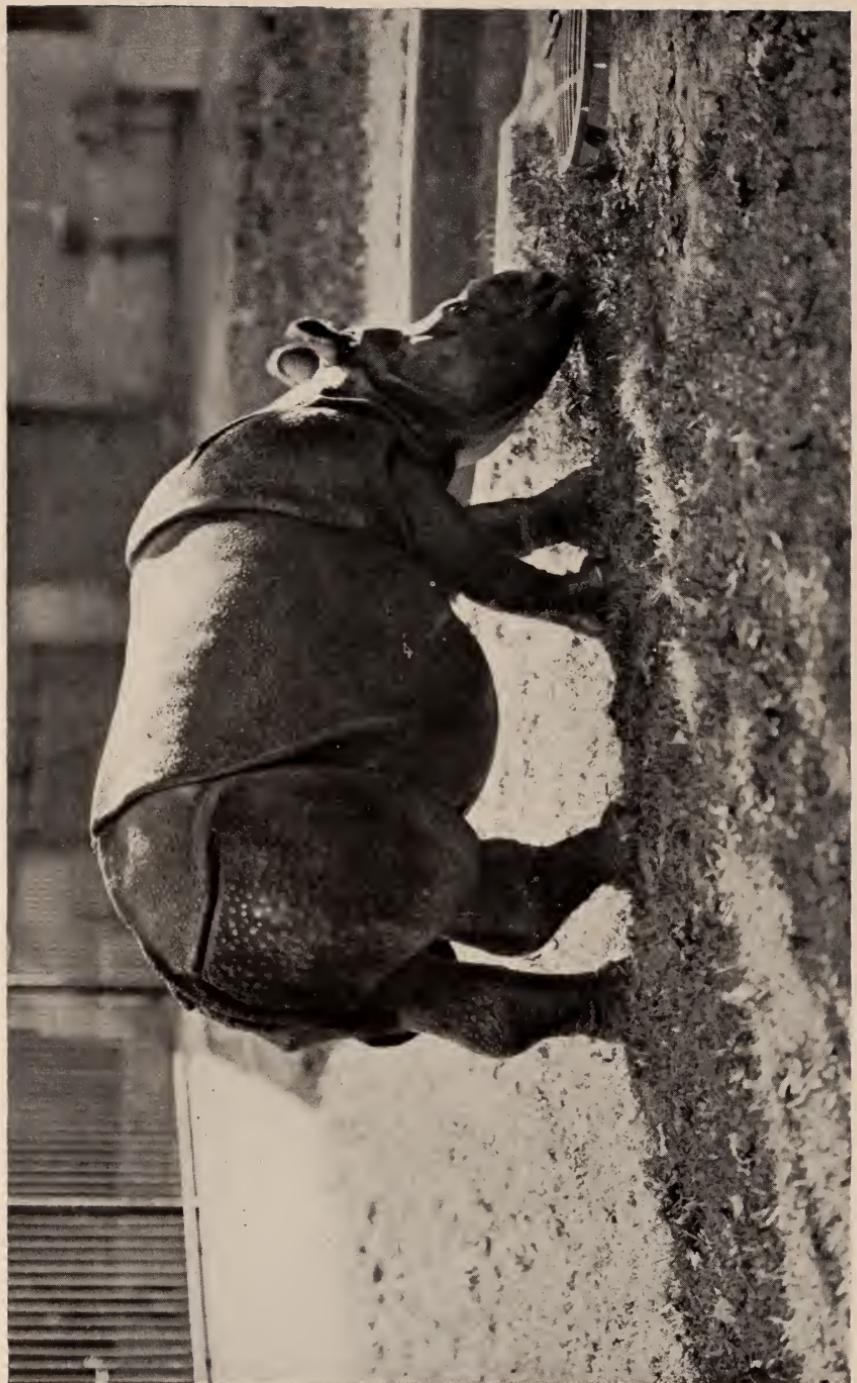
WILLIAM T. HORNADAY, *Director and General Curator.*
W. REID BLAIR, D.V.S., *Ass't. to the Director.*
H. R. MITCHELL, *Chief Clerk.*
RAYMOND L. DITMARS, *Curator of Reptiles.*
LEE S. CRANDALL, *Curator of Birds.*
WILLIAM BEEBE, *Honorary Curator of Birds.*
HERMANN W. MERKEL, *Chief Forester and Constructor.*
WILLIAM MITCHELL, *Cashier.*
ELWIN R. SANBORN, *Photographer and Editor.*

Officers of the Aquarium

CHARLES H. TOWNSEND, *Director.*
IDA M. MELLEN, *Aquarist and Secretary.*
LOUIS L. MOWBRAY, *Chief Aquarist.*
CHARLES M. BREDER, JR., *Assistant Aquarist.*
JAMES C. MOORE, *Chief Engineer.*
MARVIN C. FENSTEMAKER, *Clerk.*

Officers of the Tropical Research Station

WILLIAM BEEBE, *Director.*
ALFRED EMERSON, *Assistant Director.*
JOHN TEE-VAN, *Research Associate and Cinematographer.*
HAROLD TAPPIN, *Assistant in Entomology.*
HERMAN ROGERS, *Assistant in Photography.*
HARRY HOFFMAN, *Artist.*
ISABEL COOPER, *Scientific Artist.*
RUTH ROSE, *Historian and Technicist.*
KATHERINE ROGERS, *Microscopist.*



INDIAN RHINOCEROS

A young female acquired at a cost of \$8,000.
Photograph by Elwin R. Sanborn.

REPORT OF
THE EXECUTIVE COMMITTEE

By MADISON GRANT, Chairman

THE Executive Committee respectfully submit the following report to the Board of Managers for the year 1923:

The Committee regret to announce the death on April 5, 1923, of Watson B. Dickerman. Mr. Dickerman was an Associate Founder, a member of the Board of Managers, Class of 1925, and a member of the Executive Committee.

Your Committee also regret to announce the death of George J. Gould at Mentone, France, on May 16, 1923. Mr. Gould was a Founder in Perpetuity and a member of the Board of Managers, Class of 1924.

Arthur A. Fowler was elected to the Board of Managers, Class of 1925, to fill the vacancy caused by the death of Watson B. Dickerman. Harrison Williams was elected to the Board of Managers, Class of 1924, to fill the vacancy caused by the death of George J. Gould and to the Executive Committee to fill the vacancy caused by the death of Watson B. Dickerman.

ENDOWMENT

Rockefeller Gift: A most important event in the history of the Society was the donation by Mr. John D. Rockefeller, Jr., of \$500,000 to the Endowment Fund of the Society on June 28, 1923. We are engaged in an effort to secure an Endowment Fund of \$2,000,000 and this is the first contribution towards it. Mr. Rockefeller has also very generously offered to contribute another \$500,000 to the \$2,000,000 Endowment Fund as soon as the Society shall have raised an additional \$1,000,000. The Executive Committee has entered on an active campaign to secure this \$1,000,000 in order to enable the Society to avail itself of Mr. Rockefeller's offer of the second half million.

Harkness Gift: On July 26, 1923, Mr. Edward S. Harkness pledged the sum of \$100,000 towards the Endowment Fund of \$2,000,000, this amount to be payable if the entire amount be subscribed within one year.

The need of additional Endowment, long obvious, has now become pressing and every effort will be made by the Executive Committee to raise the full \$2,000,000. The members of the Society are earnestly requested by the Executive Committee to aid in securing in the immediate future contributions to this Fund.

Bequest of Mrs. Frederick Ferris Thompson: The Committee has been notified that under the terms of Mrs. Frederick Ferris Thompson's Will the Society will receive the sum of \$50,000, unconditionally, and a one-third share of one-half of her residuary estate, subject to the life interest of Mr. Clark Williams.

Bequest of Watson B. Dickerman: On November 8, 1923, \$20,000 was received from the Estate of Watson B. Dickerman.

With these bequests and Mr. Harkness' gift there remains \$830,000 to be raised.

MEMBERSHIP

During the year, 15 new Life Members and 119 new Annual Members were secured. The total enrolled membership of the Society, as of December 31, 1923, was as follows:

Honorary Members	7
Benefactors	6
Founders in Perpetuity.....	13
Founders	8
Associate Founders	13
Patrons	36
Life Members	363
Annual Members	2,230
<hr/>	
Total	2,676
Ladies' Auxiliary	36
Fellows	36
Corresponding Members	9
Sustaining Members	11

This shows a net gain of 35 members over 1922, after deducting deaths and resignations.

ATTENDANCE

The attendance both at the Park and Aquarium during the year 1923 shows a decrease from last year. The large decrease at the Aquarium is due to the alterations being made and the closing of the main entrance. The number of the visitors at the two institutions for 1923, as compared with 1922, was as follows:

	Park	Aquarium
1922	2,410,906	2,121,896
1923	2,395,120	1,813,647
Decrease	15,786	308,249

Total attendance for 1923—4,208,767.

COLLECTIONS AT THE PARK

A census of the animals in the Zoological Park, taken January 1, 1924, was as follows:

	January 1, 1924 Species	January 1, 1923 Species
Mammals	198	553
Birds	793	2,246
Reptiles	93	553
	—	—
	1,084	3,352
		—
		1,058
		—
		3,562

The important acquisitions during the year were:

Mammals: 1 Indian rhinoceros, 1 Bactrian camel, 1 male Bengal tiger, 1 Euro kangaroo, 2 Gelada baboons, 1 Hamadryas baboon, 1 vicuna, 1 alpaca, 1 anoa.

Birds: 2 White-headed sea eagles, 6 American egrets, 2 eastern white pelicans, 6 bleeding heart pigeons, 2 sandhill cranes, 1 Javan adjutant, 1 European flamingo, 1 toco toucan, 2 Victoria crowned pigeons.

Reptiles: 1 Indian python, 2 black cobras, 1 Florida crocodile, 1 Mexican beaded lizard, 3 diamond pythons, 1 carpet python, 2 leopard tortoises, 1 anaconda.

The health of the animals continues excellent and the only important losses during 1923 were as follows:

Mammals: 1 lion, 1 black leopard, 1 camel, 1 Anticosti black bear, 1 silver-tip grizzly bear, 1 lioness.

Birds: 1 hawk eagle, 1 wedge-tailed eagle, 1 black-necked swan, 2 American flamingoes, 1 condor, 1 trumpeter swan, 1 scarlet ibis, 1 Emperor goose.

Reptiles: 1 electric eel, 1 lung fish, 1 black cobra, 2 crocodiles, 1 rock python.

COLLECTIONS AT THE AQUARIUM

	January 1, 1924	January 1, 1923		
Species	Specimens	Species	Specimens	
Fishes	116	3,727	133	3,726
Aquatic Reptiles ...	18	99	16	138
Amphibians	9	58	11	233
Invertebrates	16	544	22	1,135
Mammals	1	1	2	4
Birds	2	2	—	—
	—	—	—	—
	162	4,431	184	5,236

The well-boat *Seahorse* was of great service to the Aquarium during the summer in keeping up the collections and in supplying food. The boat made twelve trips and collected as follows:

51 Species of Fishes.....	2,872 Specimens
12 Species of Invertebrates.....	1,188 Specimens
2 Species of Reptiles.....	7 Specimens

ALTERATIONS AT THE AQUARIUM

The alterations at the Aquarium are progressing rapidly. On June 8, 1923, the Board of Estimate and Apportionment voted the sum of \$76,500 for an additional story and other repairs to the Aquarium. Contracts for the new construction work and plumbing were awarded on August 9, 1923, to the Thomas A. Reilly Company for \$62,000 and to John Smith for \$700, respectively, and work was begun on August 28, 1923. In bidding on the work the contractor had assumed that he could use the beams supporting the ceiling of the second story

as the floor beams of the third story but when he came to strip them the discovery was made that an ancient fire had charred the ends so that they were in danger of falling. A further appropriation was therefore necessary and on November 13, 1923, the Board of Aldermen voted an additional \$9,000 for extra work.

The shifting of the old machinery and the installation of a new set of tanks on the site of the old machinery room will cost an additional \$40,000 which will be paid for by the Society. Mr. Henry D. Whiton has contributed \$10,000 towards these tanks which will be the largest and finest in the world and which will add 20 per cent to the exhibition space at the Aquarium.

When the present contract is completed the new structure will be little more than a shell, however, without water or wire connections and without finishing of any sort. It will therefore be necessary to obtain a further appropriation of \$25,000 from the City in order to complete this work.

With the repairs to the roof by the City and the excavation and waterproofing of basement and the installation therein of electrically run machinery by the Society at a cost of \$69,788.05, the addition of the third story will put the Aquarium in good working condition. For the size of the tanks, the number, variety and beauty of the exhibits, the New York Aquarium outranks any other in the world.

MAINTENANCE

Park: The sum of \$264,515 was provided by the City for the maintenance of the Park for the year 1923. This proved insufficient for our needs and a net deficit of \$9,470.68 had to be paid by the Society. For 1924 the City has provided \$264,514.49. Estimated expenditures in the amount of \$274,864.49 have been authorized which will leave a deficit of \$10,350.00 to be supplied by the Society in 1924.

Aquarium: The City provided \$59,226 for the maintenance of the Aquarium for the year 1923, which appropriation proved insufficient and a deficit of \$350 was paid by the Society. For 1924 the City has provided \$58,309.



GIANT RED KANGAROO

Really a giant in size and the largest of the Society's interesting kangaroo exhibit.
Photograph by Elwin R. Sanborn.

FINANCES

On December 31, 1923, the balances to the credit of the several Funds of the Society were as follows:

Endowment Funds

General Endowment Account (uninvested principal)	\$13,434.50
Sage Endowment Account (uninvested principal)	7,321.06
Rockefeller Endowment Account (uninvested principal)	662.50
George F. Baker Endowment Account (uninvested principal)	87.75

Special Endowment Funds

Cadwalader Animal Endowment Account (income)	3,296.58
Stokes Bird Endowment Account (income)	708.54

Special Funds

Animal Account	14,378.43
Art Gallery Account	38.67
Improvement and Repair Account	364.06

General Income Fund

(Including income from Endowment Funds, Dues, etc.)	18,327.39
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Scientific and Research Fund

Publication Account	1,645.66
Library Account	146.80
Heads and Horns Collection Account	30.67
<hr/>	
	\$60,442.61

Maintenance Funds

Zoological Park Account, Overdrawn*..	\$24,651.13
Aquarium Account, Overdrawn*.....	6,617.30
<hr/>	
	\$29,174.18

Pension Fund Income Account.....	1,592.12
Pheasant Monograph Account.....	3,364.11

* These Accounts are always overdrawn as the charges against them are paid by the Society and then collected from the City.

GENERAL ENDOWMENT ACCOUNT

The total amount of the General Endowment Account as of December 31, 1923, was \$510,843.90. Receipts during the year were as follows:

Estate of Charles E. Rhinelander..	\$ 5,000.00
Estate of Watson B. Dickerman.....	20,000.00
Various Subscriptions	1,478.08
Life Memberships	2,650.00

SAGE ENDOWMENT ACCOUNT

The Sage Endowment Account as of December 31, 1923, amounted to \$606,153.25. On June 28, 1923, \$50,000 was received, making a total of \$686,318.87 received from this Estate.

ROCKEFELLER ENDOWMENT ACCOUNT

The Rockefeller Endowment Account as of December 31, 1923, amounted to \$500,000.

GEORGE F. BAKER ENDOWMENT ACCOUNT

The George F. Baker Endowment Account as of December 31, 1923, amounted to \$100,000.

FLORENCE LYDIG STURGIS ENDOWMENT ACCOUNT

On December 28, 1923, a bequest of \$10,000 was received from Mrs. Florence Lydig Sturgis which has been set aside as a separate fund to be known as the *Florence Lydig Sturgis Fund*, the interest of which is to be devoted to the purchase of birds for the Zoological Park and for the protection of bird life in general.

ART GALLERY ACCOUNT

The Art Gallery Account as of December 31, 1923, amounted to \$38.67. In May a painting of the "Grizzly" by Carl Rungius was added to the Gallery of Wild Life in the Administration Building.

IMPROVEMENT AND REPAIR ACCOUNT

The amount to the credit of the Improvement and Repair Account on December 31, 1923, was \$364.06. Gate Receipts

have been devoted to the upkeep of the Park structures and much necessary repair work has been accomplished during the year, as set forth more particularly in the report of the Chief Constructor. Repairs to the extent of \$45,000 are imperatively needed at the Park during 1924. An appeal will be made to the City to supply \$30,000 towards this amount and the Society will make special provision for the balance.

GENERAL INCOME ACCOUNT

The General Income Account, at the end of the year, showed a balance of over \$18,000. This Fund has to meet the overdrafts of all the other funds of the Society and is consequently the point where our finances are weakest. The only way to increase it is by a larger membership or a larger General Endowment Fund.

PUBLICATION ACCOUNT

The balance in the Publication Account at the end of the year amounted to \$1,645.66. During the year the following publications have appeared: The Twenty-seventh Annual Report for 1922; the January, March, May, July, September and November numbers of the Bulletin; Zoologica, Volume II, Nos. 17 and 18; Volume III, Nos. 14 to 23, inclusive.

HEADS AND HORNS COLLECTION ACCOUNT

The balance in the Heads and Horns Collection Account at the end of the year was very small—\$30.67. On December 5, 1923, official notice was received that Joseph Benson Marvin, Jr., had left his collection of heads and horns to the Society. This collection will add greatly to the National Collection of Heads and Horns already on exhibition.

TROPICAL RESEARCH DEPARTMENT

On March 1, 1923, William Beebe, Director of the Tropical Research Department, with his staff sailed as the guests of Mr. Harrison Williams on the steam yacht *Noma* to the Galapagos Islands, returning in May. This expedition, which was a gift to the Society from Mr. Williams, amounting to \$98,670, resulted in the accession of many new and rare specimens for the Zoological Park and a large collection of illustrations and of scientific data for the publications of the Society.

Under the auspices of the Zoological Society, Mr. Beebe has prepared and published through G. P. Putnam's Sons a very handsome illustrated volume on the Galapagos Islands (*Galapagos: World's End*) which should be of great interest to all members of the Society.

The subscribers to the Tropical Research Fund for the past year were as follows:

George D. Pratt.....	\$1,000.
Coleman du Pont.....	1,000.
Mortimer L. Schiff.....	1,000.
Ogden Mills	1,000.
Robert S. Brewster.....	1,000.
Anthony R. Kuser.....	1,000.
Edward S. Harkness.....	1,000.
George F. Baker.....	1,000.
John E. Berwind.....	1,000.
Lewis Rutherford Morris.....	500.
Cleveland H. Dodge.....	250.
Transfer from General Income Ac- count	250.
	<hr/>
	\$10,000.

The Executive Committee must raise \$10,000 for the maintenance of the Tropical Research Department during the year 1924.

PHEASANT MONOGRAPH

Volume IV of *A Monograph of the Pheasants* was published early in January, 1923, thus completing this remarkable monograph, made possible through Col. Anthony R. Kuser's generosity. The total cost to December 31, 1923, amounted to \$192,319.07, the total receipts from sales amounted to \$67,-344.43, making a net amount of \$124,974.64, contributed by Col. Kuser.

CARNEGIE PENSION ENDOWMENT ACCOUNT

The Society has a Pension Fund of \$100,000, donated by Andrew Carnegie, the interest from which amounts to \$4,335. annually. It is supplemented by an annual sum of \$3,665 from the Society's General Income Fund, a heavy drain on the

resources of the Society. This total of \$8,000, together with the contributions of the employees, is inadequate. There will be, in the immediate future, many age retirements of men who have faithfully served the Society since its organization and it is the moral obligation of the Society to see that their remaining years are not passed in abject poverty. The provisions of the present Pension Fund are utterly insufficient. For example, a keeper whose salary is at the rate of \$130. a month only receives on retirement \$32.—a mere pittance in these times of high costs. Application has been made to the Carnegie Corporation for additional appropriations but without success, and the Executive Committee is deeply concerned with the problem of raising more money for this purpose.

MEDICAL DEPARTMENT

The most valuable material from our collections at the Park and Aquarium is fully utilized by Dr. George S. Huntington, the Prosector of the Society. Autopsies, whenever necessary, are made at the Park to determine causes of death. As a result of this precaution, many preventable diseases have been eliminated. The Medical Department at the Park already possesses a large collection of pathological and anatomical data of great value but more funds should be made available for the study of this material and for publication of results.

During 1923, 281 specimens were also sent to the Department of Comparative Anatomy of the American Museum of Natural History.

One of the needs of the Society is the erection and equipment and proper maintenance of a Biological Laboratory at the Park where studies can be made on the living animals and on the anatomy and pathology of those that die.

RECEPTIONS

Annual Dinner: The Fifteenth Annual Dinner to the Board of Managers was held through the courtesy of Mr. Robert S. Brewster at 100 East 70th Street on Wednesday, December 26, 1923.

Spring Meeting: The Spring Meeting of the Board of Managers was held in the Administration Building on May 17,



PUEBLO INDIANS FROM NEW MEXICO

Pausing a moment in their Eastward mission to protest against the passing of the Borsum bill, these delegates spent a few peaceful hours in the Zoological Park inspecting the animals familiar in their plains life. One of the Indians is seventy-four years old.

Photograph by Elwin R. Sanborn.

1923. The meeting was preceded by a luncheon and followed by the Annual Garden Party at which the Ladies' Auxiliary acted as a Reception Committee. The collections of drawings by Miss Isabel Cooper, of prepared specimens and of living animals which the Tropical Research Department had brought back from the Galapagos Islands were on exhibition during the afternoon.

MEMORANDUM OF MEETINGS

1924-1925

Annual Meeting of the Society
JANUARY 13, 1925, 8:30 P. M.
Hotel Waldorf-Astoria

Meetings, Board of Managers
January 20, 1925, 3:00 P. M. May 15, 1924, 2:30 P. M.
Annual Meeting Park Meeting
Down Town Association Preceded by Luncheon at
1:30 P. M.

Annual Dinner
December 26, 1924

Executive Committee Meetings
January 9 May 14
February 13 June 11
March 12 October 8
April 9 November 12
December 10

Members' Day and Ladies' Day at the Zoological Park:
May 15, 1924, 3:00 P. M.

AUDITING

The Auditors, Messrs. Marwick, Mitchell & Company, have audited and found correct the accounts of the Society.

In Memoriam

WATSON B. DICKERMAN
GEORGE J. GOULD

At the meeting of the Executive Committee held on April 12, 1923, the following Resolution was adopted:

"When the honorable and useful life of Watson B. Dickerman came to a close on April 5, 1923, the community in which he lived lost, not only a citizen who always stood for the best interests of mankind, but his more immediate friends realized that their circle had been deprived of a loyal, lovable, human companion.

Mr. Dickerman's last illness was one of suffering and sorrow, borne with a noble, unselfish and brave determined courage worthy of his beautiful character.

While for many years Mr. Dickerman was constantly and most successfully occupied with broad duties and great responsibilities, it was to Nature and the love of the soil, the development of beautiful fruits and flowers and the care of his fine animals that he turned whenever free to do so.

His home at Hillanddale gave the evidence of his thoughtful care while his almost unequal'd success as a breeder of the American trotting horse showed with great conclusiveness how truly his rare good judgment had developed all the best qualities in that most noble and beautiful branch of the animal kingdom.

We who had the great good fortune to labor with him in the care and management of civic and educational institutions pay our faithful tribute to his ability and rare charm of mind and manner.

We shall miss him greatly from our gatherings and the memory of what he stood for and what he accomplished will be ever a treasured and precious possession."

At the Spring Meeting of the Board of Managers on May 17, 1923, the following Resolution was adopted:

"Resolved, that the Board of Managers of the New York Zoological Society learn with deep regret of the death of their colleague, George J. Gould, a member of the Class of 1924, and desire to make this record of their appreciation of his great generosity and continued interest in the scientific work of the Zoological Society."

The Auditor's Report, as well as that of the Auditing Committee, follows the Report of the Treasurer.

ACKNOWLEDGMENTS

The Directors of the Park and Aquarium and their respective staffs have worked faithfully to maintain their institutions at a high standard of efficiency. The Committee desire to acknowledge with appreciation their zeal and energy.

Respectfully submitted,

MADISON GRANT, *Chairman*

PERCY R. PYNE,

HARRISON WILLIAMS,

WM. WHITE NILES,

WM. PIERSON HAMILTON,

FRANK K. STURGIS,

WM. REDMOND CROSS,

ANTHONY R. KUSER,

FREDERIC C. WALCOTT,

HENRY FAIRFIELD OSBORN, *ex-officio*,

CORNELIUS R. AGNEW, *ex-officio*.



ABYSSINIAN LION: MENELEK

"And leaning back he yawned and fell asleep."
Photograph by Elwin R. Sanborn.

REPORT OF THE LADIES' AUXILIARY

THE regular winter business meetings of the Ladies' Auxiliary were held in December, 1922 and February, 1923, at the office of Mr. Thomas Hastings, 52 Vanderbilt Avenue; the reports of the various committees showing a very prosperous and successful season.

Under the auspices of the Parks and Playgrounds Association, of whose committee Miss Pauline Robinson, is Chairman, hundreds of children were taken to the Zoological Park for recreation and study. The children, in groups varying from forty to sixty, were under the direction of play leaders and guides who escorted their little charges about the Park making their trips not only instructive but enjoyable as well.

Groups were selected from the West 38th Street Roof Playground, the Henry, Houston and Spring Street Playgrounds, the East 74th Street Play Centre, and the College Settlement. Lunches and transportation were provided, and during the summer over 1600 children were taken in this way to the Zoological Park; the Ladies' Auxiliary of the New York Zoological Society providing the funds.

Mrs. Michalis, Chairman of the Junior Auxiliary, reported that many new and younger members had been enrolled in the Auxiliary during the past year; thus more than replacing the older ones who had entered boarding schools or colleges.

The usual mid-winter lecture was held and the delighted audience of children viewed a series of fascinating pictures of wild animals in their native habitat.

The annual donation for the purchase of an animal was sent to the Animal Fund of the Zoological Park. This has now become a regular yearly offering to the Park from the children of the Junior Auxiliary.

It was reported from the Committee on Endowment, that of the fund of \$5,000 to be raised by the Ladies' Auxiliary as their contribution toward the Endowment Fund of the Zoological Society, \$2,650 already had been collected and sent to the Treasurer of the Society, leaving a balance of \$2,100 still to be collected. When completed this fund will be known as the Ladies' Auxiliary Endowment Fund of the New York Zoological Society.

In February, the mid-winter lecture was given at the residence of Mrs. Vincent Astor, by Curator Ditmars of the staff of the Zoological Park. He spoke in a delightful manner on "The Origin of Life," tracing the long ascent of this interesting problem from its most primitive beginning. The subject, a thrilling one, was wonderfully told, and his marvellous moving pictures illustrated the various phases of this greatly mooted question in a very convincing manner. A large and enthusiastic audience warmly greeted the speaker. William Beebe followed with a discussion of the Zoological Park and its needs. Dr. W. T. Hornaday, Director of the Park, introduced the speakers.

The Annual Garden Party was held on May 17, 1923, at the Zoological Park, Mrs. George F. Baker, Jr., acting as Chairman of the Committee on Arrangements. Several new features, which had been arranged at the business meeting of the Ladies' Auxiliary were much enjoyed; among them moving pictures of the animals in their surroundings in the Park.

The day was superb, and a military band playing stirring music added to the charm of a perfect summer afternoon.

The Bird House seemed alive with the flashing jewels of its many brilliantly colored tropical birds, and it was alive with song, each bird seeming to vie with every other in the wonderful chorus.

In the Reptile House, the great hooded cobras appeared like Japanese warriors of the olden time in their bronze coats of mail.

The usual large attendance, and the many children of the members of the Society who were present made the scene with its background of fresh foliage and shrubbery, vividly picturesque and animated.

The year 1922-1923 closed with the regular membership of the Ladies' Auxiliary which appears printed in full on page 167 of this report.

Respectfully submitted,

MRS. HENRY FAIRFIELD OSBORN, *Chairman.*
998 Fifth Avenue.

MRS. WILLIAM B. OSGOOD FIELD, *Secretary,*
645 Fifth Avenue.

MRS. CLARENCE G. MICHALIS, *Chairman, Junior Auxiliary,*
455 Madison Avenue.

MISS PAULINE ROBINSON, *Chairman, Children's Excursions,*
129 East 35th Street.



AFRICAN PYGMY AND INDIAN ELEPHANTS

Beside the huge bulk of the Indian elephant "Luna" the diminutive size, and structural characteristics of the Pygmy are clearly shown.
Photograph by Elwin R. Sanborn.

REPORT OF THE DIRECTOR OF THE ZOOLOGICAL PARK

By WILLIAM T. HORNADAY

THE year 1923 closed with the animal collections of the Zoological Park on a very satisfactory footing; and the annual total of visiting attendance stood at a figure that requires neither explanation nor apology. We succeeded in securing the great Indian rhinoceros that for four years we had been seeking to obtain, and its successful acclimatization in New York is now an accomplished fact. The United States Government's return gift of four bison from the Wichita National Bison Herd arrived last spring in good condition, and now serves a good purpose.

Often we are led to wonder whether the people of New York are even dimly aware of the fact that the annual maintenance fund of the Zoological Park is inadequate by nearly \$40,000. At all events, this is the lamentable fact, and but for the salvage policy of the Zoological Society the Park would even now be half in ruins. There are organizations which seem to rejoice and make glad over annual deficits in maintenance, but the New York Zoological Society is not one of them. It is now no secret whatever that but for the breadth of mind and the scope of generosity manifested last year by Mr. John D. Rockefeller, Jr., the Zoological Society now would be in actual financial embarrassments. Whether the Society is going to be enabled to reach a standing-place on firm ground is even yet an open question.

On the part of the Society's business partner in the creation and maintenance of the Zoological Park,—the City of New York,—the unkindest cut in our budget for 1924 was the refusal of the Board of Estimate even to participate in the maintenance of the beautiful Museum of the National Collection of Heads and Horns that the Society, aided by the sportsmen of the world, generously created and opened free, daily, for the benefit of the millions of New York. Even the modest sum of \$1,500 asked by the Society in its Park budget for the pay of the solitary Museum attendant, and \$1,200 for the electric lighting maintenance, were

disallowed, and the Society must continue to furnish these sums, or close the building.

The discriminatory and unjustly low scale of wages in the Park continues to be a source of disappointment, discontent and unrest in the force. But for the relief measures that have been taken by the Society, the whole line of Park officers and men would have found the cost of living insupportable.

ZOOLOGICAL PARK ATTENDANCE

	1923	1922
January	29,886	96,565
February	46,370	94,885
March	158,763	163,043
April	192,900	280,174
May	386,444	342,846
June	309,156	207,585
July	320,742	322,850
August	291,801	269,121
September	310,560	232,341
October	147,169	180,230
November	109,906	136,982
December	91,423	84,283
	2,395,120	2,410,906

EDUCATIONAL WORK

During the past year the output of wild-animal lore published about the animal collections of the Park reached the highest mark it has attained up to the present. The total number of carefully written, well illustrated and thoroughly instructive magazine and newspaper articles, and syndicated "animal stories" published, has been really great. The most far-reaching item of this line of endeavor was the publication in a syndicate of 29 Sunday newspapers of the Park Director's book on animal intelligence and personality entitled "The Minds and Manners of Wild Animals." This brought the mental and moral traits of scores of the most interesting mammals, birds and reptiles of the Park into close touch with great masses of people, many of whom never have been able to visit the Park.

The book was intended to promote appreciation of wild animals at their true value, and to secure the practical recognition of their rights at the hands of man. The day by day Sunday circulation of the newspapers that participated in this effort amounted to a daily total 1,979,013 copies.

The continued exhibition throughout the United States, Canada and England of the motion pictures of our animals as developed by Mr. Raymond L. Ditmars has been a great contribution to the information of the millions in wild animal personality. The educational value of such pictures is hardly to be over-estimated, and it is to be hoped that this zoopictorial exploitation of the forms, lives and habits of our animals will not only be continued, but in the future will be greatly extended. Of course it is to be understood that both the lines of educational activities mentioned above have been developed without any expense to the Zoological Society or to the City.

THE MOVEMENT FOR NEW ZOOS

The whole United States is now being swept by a tidal wave of popular demand for new municipal zoological parks. The total number of infant zoos, and zoos in the embryo stages, must number at least fifty.

Each year the Zoological Park staff is called upon by at least a score of active or presumptive zoo makers for advice and information regarding plans and foundations. We have distributed materials intended to be helpful, all the way from Prague to the City of Mexico, and some of this effort has proved worth while.

In view of the great zoological awakening in Mexico under the friendly influence of President Obregon and his cabinet, plus the development of new and gratifying public interest in securing practical protection for the wild life of Mexico, we are naturally most sympathetic toward the National Zoological Park of Mexico, located in the Park of Chapultepec. Our relations with all the zoological and game-protective developments in Mexico are cordial and close, and the records of the Permanent Wild Life Protection Fund presently will reveal an interesting story of activities and results in behalf of the mountain sheep and prong-horned antelope of Mexico.

DE BRAZZA MONKEY
An African species—one of the large genus—*Cercopithecus*, many of which are so oddly marked as to present the rather bizarre appearance of this specimen.
Photograph by Elwin R. Sanborn.



EMERGENCY FUND NEEDED TO AID AFFLICTED EMPLOYEES

In view of the experiences of the past twenty-five years, I desire to place on record a recommendation for the creation of a special endowment fund of \$25,000, the income of which should be devoted exclusively to grants in aid to members of the Park force who are ill, or who have to cope with serious illnesses in their families. The calls to finance serious surgical operations, with the usual accompaniment of hospital expenses, and illnesses demanding trained nurses, are many and urgent. Whenever they come, they are imperative, for the life of an employee, or the life of a member of his family, cannot be permitted to go out because a reasonable sum in cash is not available to finance the doing of the necessary thing at the critical hour.

We hereby respectfully invite a subscription of \$25,000, to be called the Relief Fund, the income of which shall be used only in payments for sickness expenses, or surgical operations of employees of the Zoological Society, or members of their immediate families.

DEPARTMENT OF MAMMALS.

W. T. HORNADAY, Curator; R. L. DITMARS, Assistant Curator;

JOHN TOOMEY, Head Keeper.

Regular visitors to the Park occasionally remark upon the continuous supply of interesting exhibits, but it is probable that few of them realize the endless round of effort that is involved. In the first place, the quest for new and more interesting animals is continuous and far-reaching. The new arrivals, and their successful settling in their new homes, always causes much work and anxiety. Constant inspections, and requisitions for repairs and replacements, are the prices that must be paid for satisfactory exhibits. Frequently specimens must be shifted for the greatest good of the greatest number.

Labels are constantly being renewed or renovated, and the demands in this line of endeavor are inexorable. An entirely new series of hand-painted picture labels for the large series of bear dens was prepared, and all the colored maps in the buildings showing range and distribution as well as the outlines of classification, were brought up to date.

One of the largest tasks of the Mammal Department during the year was the sale, capture, crating and shipping of our duplicate hooved animals that had accumulated by breeding. A sales list prepared by the Director was mailed to the various zoological institutions of the United States, and the responses were immediate. All of the animals offered save two were soon engaged. It then fell to Mr. Ditmars to superintend the making of an extensive series of crates to accurately fit the many-sized animals, to cut the desired animals from the herds, corral, capture and crate them. In shipping a large animal, it is necessary that its travelling cage shall be neither too large nor too small, and it must include provision for cleaning, and the service of food and water.

The shipments to be made included an adult male yak, a zebra, several Himalayan tahr and five species of deer in groups varying from fours and up to a dozen of a kind, and all of them wild and excitable. Chutes were designed and hay-padded trapping rooms were arranged in the shelter barns.

The entire lot of sold animals was captured and crated without injury, shipped by train and steamer to many distant points, and every animal reached its destination in perfect condition. These sales amounted to about \$4,000.

Inasmuch as our mammal collections were well stocked, purchases during the year 1923 were few. The most interesting animals added to the collections were as follows:

An exceptionally fine specimen of the rare DeBrazza monkey, two adult male Gelada baboons, one adult male Hamadryas baboon, a male drill, a tayra, Aard wolf, Himalayan bear, an extra fine adult male Bengal tiger, a South American puma, two California sea lions, a Bactrian camel, vicuna, alpaca, mouse deer, anoa, a pair of Malayan tupaias, giant red kangaroo, Euro kangaroo, two island kangaroos, two rufous-necked wallabies, two Tasmanian devils and one wombat.

The most important addition among the mammals during the past year was the young Indian Rhinoceros from Nepal, very successfully brought to us by Mr. Frank H. Buck.

Among the gifts were six American Bison, from the Department of Agriculture, bred from the nucleus herd sent by the Society to the Wichita National Bison Range in Oklahoma in 1907. Other gifts included a South American puma, golden

marmoset, adult howling monkey, Mongolian hedgehog, wallaroo and an Australian bandicoot. A full list of the gifts and acknowledgments appears in another part of this report.

The death rate from natural causes during the past year was low when compared with the extensive collections of the Park. The only losses of importance were a black leopard and a Cape hunting dog. Several very old specimens were mercifully eliminated from the collections.

The following is a list of the births during the year:

1 Mongoose Lemur	1 Anoa
4 Golden Agoutis	5 Barasingha Deer
3 Woodchucks	1 Sambar Deer
2 Viscachas	2 Hog Deer
6 Skunks	5 Red Deer
4 Aoudad	6 Fallow Deer
4 Himalayan Tahr	1 Axis Deer
1 Mouflon	3 White-tailed Deer
2 Bison	2 American Wapiti
1 Yak	1 Pigmy Hippopotamus
1 Ring-tailed Wallaby	1 Black Swamp Wallaby

A census of the mammal collections at the close of the year is enumerated:

Orders	Species	Specimens
Marsupialia	16	56
Insectivora	1	1
Carnivora	50	112
Pinnipedia	2	7
Rodentia	20	67
Edentata	2	2
Primates	43	91
Artiodactyla (Even-toed Ungulates).....	48	193*
Perissodactyla (Odd-toed Ungulates).....	12	20
Proboscidea	3	3
Hyracoidea	1	1
Total	198	553

*NOTE:—The decreased number of hoofed animals on December 31, 1923, as compared with the figures of the year preceding, is accounted for by the sales of duplicates during the past spring.



AUSTRALIAN SWAN

It has been said that more of these swans now exist in captivity than in the wild state. The black swan is the heraldic emblem of West Australia.

Photograph by Elwin R. Sanborn.

DEPARTMENT OF BIRDS

LEE S. CRANDALL, Curator; WILLIAM BEEBE, Honorary Curator;
SAMUEL STACEY, Head Keeper.

During the past year, arrivals of live birds in the American market have remained at a very low point, as compared with pre-war standards, and it begins to appear that we shall have to accept the changed conditions as normal. Many factors have operated to bring about this result, and as the influence of several of these is likely to continue, regardless of general economic conditions, it is probable that we never will see a return to the old status.

A general increase in restrictive legislation, in many parts of the world, unquestionably of beneficial character to wild bird faunas, has greatly reduced the number of species available for importation. The most important of these is a recent law which prohibits the exportation from Australia of native birds and mammals "for private profit." While the wording of this act does not forbid the shipment of such species for scientific purposes, in effect it does so very thoroughly, since the handling of large consignments can be undertaken only on a commercial basis. The United States Tariff Act, effective in the autumn of 1922, imposing a duty on all live birds imported, has militated against the trade, and resulted in greatly increased prices, as well as reduced importations.

No large shipments were received by dealers during the year, though arrivals of small lots were fairly frequent. By the exercise of some diligence, fifty species new to the collection were obtained, a number disproportionately large as compared with total accessions. Prominent among these were five new forms of fruit pigeon, eleven species of these rare and beautiful birds now being included in the collection.

The most important consignment received during the year was that brought by the Williams Galapagos Expedition, under the direction of Mr. Beebe. This included a number of exceedingly rare species, several of which have never before been exhibited alive. Most notable were three Galapagos penguins (*Spheniscus mendiculus*) ; 2 flightless cormorants (*Nannopterum harrisi*) ; one Galapagos hawk (*Buteo galapagensis*) ; one Galapagos dove (*Nesopelia galapagoensis*) ; three swallow-

tailed gulls (*Creagrus furcatus*) ; two Tower Island mockingbirds (*Nesomimus baueri*) ; and one black-eared mockingbird (*Nesomimus melanotis*). Apparently because of the lack of salt water, it was found that the penguins and cormorants would not thrive at the Zoological Park. In consequence, through the cooperation of Dr. Townsend, they were transferred to the Aquarium where, in the great indoor sea-water pools, they are very much at home.

On November 21st, through the generosity of Mr. Emory W. Clark we received the entire collection of our former Benefactor, the late Mrs. Frederick Ferris Thompson. This included eighty-nine specimens, of forty-five species, a most welcome accession.

SPECIES OF BIRDS NEW TO THE COLLECTION

Received During 1923

- Salvin Razor-billed Curassow—*Mitu salvini* Reinh.
Pink-necked Fruit Pigeon—*Osmotreron vernans* (Linn.).
Yellow-breasted Fruit Pigeon—*Leucotreron occipitalis* (Bonap.).
Black-chinned Fruit Pigeon—*Leucotreron leclancheri* (Bonap.).
Negros White-eared Fruit Pigeon—*Phapitreron nigrorum* Sharpe.
Black-headed Fruit Pigeon—*Spilotreron melanocephala* (Forst.).
Hazel-backed Green-winged Pigeon—*Chalcophaps stephani* Reich.
Galapagos Dove—*Nesopelia galapagoensis* (Gould).
Peruvian Ground Dove—*Eupelia cruziana* (D'Orb.).
Gray-hooded Pigeon—*Phlogoenas rubescens* (Vieill.).
Red-faced Rail—*Neocrex erythrops erythrops* (Scl.).
Galapagos Penguin—*Spheniscus mendiculus* Sundev.
Swallow-tailed Gull—*Creagrus furcatus* (Neboux).
California Brown Pelican—*Pelecanus occidentalis californicus* Ridg.
Eastern White Pelican—*Pelecanus roseus* Gmel.
Blue-faced Booby—*Sula cyanops* (Sund.).
Flightless Cormorant—*Nannopterum harrisi* Rothschild.
Galapagos Hawk—*Buteo galapagensis* (Gould).
Savigny Eagle Owl—*Bubo ascalaphus* Savigny.
Malayan Wood Owl—*Strix seloputo* (Horsf.).
Javan Fish Owl—*Ketupa ketupa* (Horsf.).
Philippine Cockatoo—*Ducorpsius haematuropygia* (Mull.).

- Bodin Amazon Parrot—*Amazona bodini* (Finsch).
 Pileated Parrakeet—*Pionopsittaca pileata* (Scop.).
 Salvadori Parrakeet—*Pyrrhura emma* Salvad.
 Brown-necked Parrot—*Poeocephalus fuscicollis* (Kuhl.).
 Purple-tailed Wood Hoopoe—*Phoeniculus viridis* (Licht.).
 Great Ani—*Crotophaga major* Gmel.
 Tower Island Mockingbird—*Nesomimus baueri* Ridg.
 Black-eared Galapagos Mockingbird—*Nesomimus melanotis* (Gould).
 European Blue Rock Thrush—*Monticola solitarius solitarius* (Linn.).
 Bonaparte Striped Manakin—*Machaeropterus striolatus* (Bonap.).
 Red-headed Titmouse—*Aegithaliscus erythroccephalus* (Vig.).
 Indian Scarlet Minivet—*Pericrocotus speciosus* (Lath.).
 Black-and-Crimson Shrike—*Laniarius atrococcineus* (Burch.).
 Yellow-throated Calliste—*Tangara arthus* (Less.).
 Festive Calliste—*Tangara cyanocephala* (Mull.).
 Orange-breasted Calliste—*Tangara thoracica* (Temm.).
 Blue-and-Olive Tanager—*Thraupis olivicyanea* (Lafr.).
 Archbishop Tanager—*Thraupis ornata* (Sparrm.).
 White-capped Tanager—*Stephanophorus diadematus* (Mikan).
 Argentine Red-breasted Blackbird—*Leistes superciliaris* (Bonap.).
 Yellow-breasted Blackbird—*Pseudoleistes virescens* (Vieill.).
 De Filippi's Red-breasted Blackbird—*Trupialis defilippi* Bonap.
 Lichtenstein Oriole—*Icterus gularis gularis* (Wagl.).
 Espinach Oriole—*Icterus pectoralis espinachi* Ridg.
 Sclater Oriole—*Icterus sclateri* Cass.
 Philippine Glossy Starling—*Lamprocorax panayensis* (Scopoli).
 Black-backed Bald Myna—*Sarcops melanopterus* Grant.
 White-necked Crow—*Corvus scapulatus* Daud.

CENSUS OF BIRDS LIVING IN THE NEW YORK ZOOLOGICAL PARK

January 1, 1924

	Species	Specimens
Rheiformes,	Rheas	1 2
Struthioniformes,	Ostriches	2 3
Casuariiformes,	Cassowaries and Emus	2 5
Tinamiformes,	Tinamous	4 8
Galliformes,	Quail, Pheasants, etc...	67 171
Turniciformes,	Hemipodes	2 5

		Species	Specimens
Pteroclitudiformes,	Sand Grouse	1	4
Columbiformes,	Pigeons and Doves.....	67	203
Ralliformes,	Rails and Gallinules.....	17	37
Lariformes,	Gulls and Terns.....	16	61
Charadriiformes,	Plovers and Sandpipers	9	21
Gruiformes,	Cranes, Seriemas, etc..	15	29
Ardeiformes,	Ibis, Storks and H erons	34	68
Palamedeiformes,	Screamers	2	5
Phoenicopteriformes,	Flamingoes	1	1
Anseriformes,	Swans, Geese and Ducks	59	325
Pelecaniformes,	Cormorants, Pelicans, etc.	13	33
Cathartidiformes,	New World Vultures....	4	5
Accipitriformes,	Old World Vultures; Hawks and Eagles..	26	36
Strigiformes,	Owls	17	29
Psittaciformes,	Parrots, etc.....	75	162
Coraciiformes,	Kingfishers, Hornbills, etc.	10	11
Cuculiformes,	Cuckoos and Touracos	6	13
Scansoriformes,	Barbets and Toucans....	16	24
Piciformes,	Woodpeckers	3	4
Passeriformes,	Perching Birds	317	1,090
		<hr/>	<hr/>
		786	2,355

Summary: Orders, 26; Species, 786; Specimens, 2,355.

DEPARTMENT OF REPTILES.

RAYMOND L. DITMARS, Curator; JOHN TOOMEY, Head Keeper,

In the development of our educational work many classes of school children have been instructed while in the Reptile House, and the Curator has delivered a number of lectures relating to mammals and reptiles. In these, the collections of the Society and observations thereon have been presented before audiences at universities, colleges, and in the larger high school auditoriums to an approximate total of about fifty thousand for the year. The Curator prepared additional mo-

tion pictures indicating habits and recording rare specimens among the mammals and reptiles, which films were arranged for presentation at the annual meeting of the Society.

We have continued our researches into the production of specific serums for the bites of poisonous snakes. The Brazilian supply is now difficult to obtain, and many inquiries for serum come to this department, creating at times a quite formidable correspondence. At the request of several magazines for general information, the Curator of Reptiles prepared articles thoroughly covering this subject, which have created a better understanding of recent advances in the treatment of snake-bites. The situation is all the more interesting because of a clearly indicated increase of poisonous reptiles in several parts of this country. Combined with this is the rapidly increasing number of hikers, campers and long-distance automobile tourists. A sharply mounting hazard has been the natural result, illustrated by the considerable increase of mortality figures. The Curator of Reptiles quite systematically covered this subject the past year in an attempt to obtain a total of deaths in the United States during the past year from the bites of poisonous snakes. By correspondence, by a collection of newspaper clippings (verified whenever possible), and letters to the state boards of health in all the states, it was possible to form a fairly definite estimate.

Assertions have been made that the death rate from snake-bites in the United States seldom exceeded an annual average of a dozen per year. While this may have been the case in the past, the recent figures now certainly indicate an average annual mortality from this cause as high as one hundred and fifty, a condition demanding serious attention. And this, of course, does not take into consideration recoveries wherein a seriously maimed condition may have been part of the result.

We need specific serums produced in this country, and from a source whence we can depend upon steady production. It is quite unfair to rely upon our Brazilian colleagues for a constant supply, because they are confronted with home experimental problems requiring all their time. It seems difficult to induce the larger commercial laboratories to produce serums because of the fear that the demand would not be sufficiently large to render production financially practicable. This work should fall to the lot of one of the philanthropic laboratories

or foundations, and we hope to induce one of them to meet the situation.

Much collecting work was carried on the past spring, such as always is necessary with our reptile collection. The reptile department has difficulties differing from the other collections in the Park, because only a portion of its exhibits can be obtained by purchase. The Curator made a number of motor trips, and from a fine series of specimens obtained made very satisfactory exchanges of duplicates with other zoological institutions in this country.

A very large task was started the past year, in the complete renovation of the scenic backgrounds of the big cages of the Reptile House. These have been generally admired, as imparting distance and atmosphere. The backgrounds painted eight years ago were becoming soiled and otherwise damaged. After due consultation we found that Mr. E. A. Costain, who originally painted them, was too pressed by other duties to undertake the work of renewal. We were gratified and relieved by the willingness of Mr. Paul Hertzel, who has been doing some noteworthy modeling and painting of animals in the Park, to undertake the entire series. Mr. Hertzel's work is well under way, and is eliciting much praise.

A number of important purchases figure in our records for the past year. We exhibited alive, for the first time as we believe, the big Mexican Beaded Lizard, a giant poisonous ally of the Gila Monster, and the Ringed Rattlesnake, (*Crotalus lepidus*). Among the noteworthy purchases were the following: 6 South American Caimans, 1 Florida Crocodile (nine feet long), 1 Matamata, 2 African Tortoises (each weighing 100 pounds), 2 Anacondas (one weighing 135 pounds), 12 South American Boas, 3 Indian Pythons, 3 Diamond Pythons, 1 Carpet Python, 2 Philippine Cobras, 2 Indian Cobras, 5 Puff Adders and 1 Electric Eel.

Among the gifts were a young Galapagos Tortoise, 1 Red Rattlesnake, 2 Horned Rattlesnakes, a turtle sixty years old, an albino gopher snake and an albino blacksnake. Several interesting Pacific Coast reptiles were received through the courtesy of the Zoological Society of San Diego. Mr. Arthur L. Gillam, to whom we are indebted for many gifts in past years, spent several weeks collecting in Florida, and among

other specimens donated a series of twelve large Diamond-back Rattlesnakes. A full list of these gifts and acknowledgments is printed in another portion of this report.

A very noteworthy addition to the Reptile Department was the series of twenty Marine Iguanas and eighteen Land Iguanas brought back by the Harrison Williams Expedition from the Galapagos Islands, under the direction of Mr. Beebe. These rare and strange forms have never before been exhibited alive except as extremely infrequent single specimens.

The following is a census of the collections in the Reptile House at the close of the year:

	Species	Specimens
Crocodilia	4	39
Chelonia	21	116
Lacertilia	12	51
Ophidia	48	226
Amphibians	8	121
	—	—
Total	93	553

A complete enumeration of the animal collections is as follows:

CENSUS OF THE ZOOLOGICAL PARK COLLECTIONS

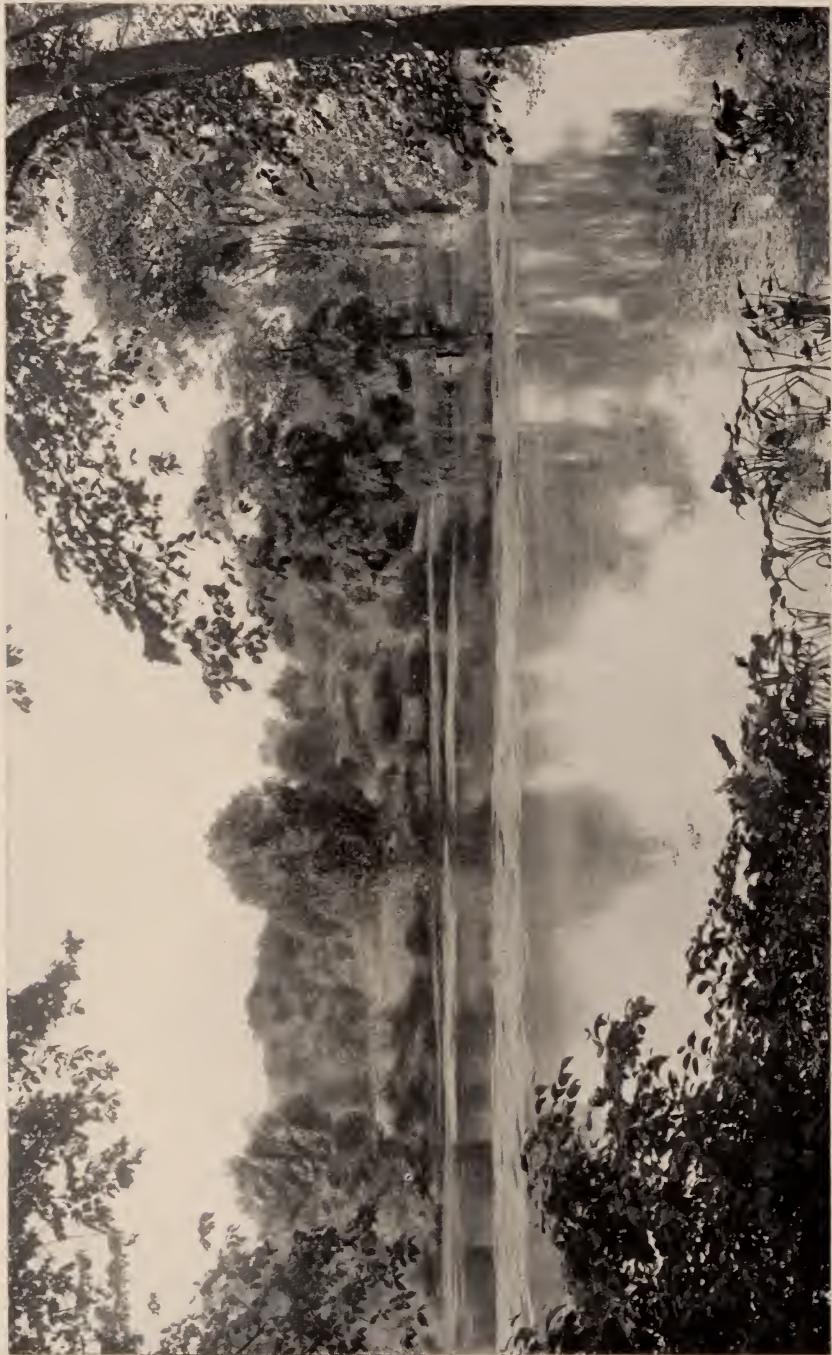
January 1, 1924.

	Species	Specimens
Mammals	198	553
Birds	793	2,246
Reptiles and Amphibians	93	553
	—	—
	1,084	3,352

REPORT OF THE VETERINARIAN.

W. REID BLAIR, D. V. S.

The number of deaths among the mammals during 1923 was 161, or 33 less than for the previous year. These losses were divided among the various groups as follows: Small Mammals, 86; Primates, 43; Hoofed Animals, 25; Lions, Bears, Wolves and Foxes, 7. The greater number of deaths among our collections were principally confined to the less important



Not all of the interests of the Zoological Park are numbered among the collections. For those who care for natural beauty, there are many places in the Park that are exceptional for their peaceful loveliness.

LAKE AGASSIZ
Photograph by Elwin R. Sandorn.

and readily replaceable small mammals, like opossums, wood-chucks, agoutis and squirrels. The percentage of deaths from any one cause as compared with the total number of deaths has not changed materially during the past few years. Digestive disturbances, due in a large measure to the necessarily artificial diet, remain the chief causative factor.

One of the greatest problems connected with the keeping of a large variety of small mammals is the question of diet, both qualitative and quantitative. Recent experiments in feeding various minerals and vitamins, which are likely to be deficient in the food supplied to many of our animals, seem to offer promising results. It is hoped that a practical method can be devised whereby the various mineral mixtures can be placed in accessible places, and where they may be partaken of by the animals at will. The advantage of self-feeding the mineral mixtures is to insure that the appetite of the animal for minerals will be satisfied, and that metabolism will not be upset by supplying an excess of these substances.

Among the new-born animals which failed to survive, chiefly on account of exposure or parental neglect, were 2 buffalo calves, 5 fawns, 3 lion cubs, 1 bear cub, and numerous small mammals, such as opossums, raccoons, agoutis and wood-chucks. The only noteworthy losses occurring among our more important mammals were several of our older specimens, i. e., Bactrian camel, lion, a silver tip grizzly and our old Prjevalsky mare. All of these have been on exhibition in the Park for many years.

In the Primate Collection the losses have been confined to the less important species, and no noteworthy animal in this fine collection has been lost. One of the orangs suffered an attack of pneumonia, but made a good recovery. Aside from this case, all the members of the collection of anthropoid apes continue to enjoy excellent health. A number of monkeys presented to the Park were found to be affected with tuberculosis. These were destroyed before they were able to expose any of our animals to infection.

Many other gift animals were found to be in ill health, a considerable number merely suffering from malnutrition on account of improper food; and others were found in various stages of rickets. A great many of these animals showed im-

mediate improvement when placed upon a rational diet, and those affected with rickets recovered when properly treated, and the necessary vitamins and inorganic minerals supplied. The animals are carefully selected, only those being accepted which show rickets in the early stages of the disease. The results, as shown by the recoveries, are most satisfactory.

With few exceptions, the health of the animals in the Lion House has been satisfactory; in fact, the big cats have never been in quite as good condition as at the present time. It was necessary to destroy one of our old lions, which had reached an age when it was no longer enjoying life.

While there are always a certain number of medical and surgical cases among our animals, we have, however, been fortunate in the fact that no epidemic of any kind has been in evidence during the year. While distemper has been unusually severe among domestic dogs in the vicinity of the Park during the past year, it has been absent from our collections. All canines introduced have been subjected to a five weeks' quarantine and observation period before the new animals were introduced into our cages. While it is expected that from time to time infected animals will creep into our collection, despite the most cautious supervision, extra vigilance in regard to the disease of distemper to which animals may have been exposed in transit and which may not become evident until some time after they have come into our possession is well repaid. The longer period of quarantine has been found necessary in order to detect delayed cases, and thus avoid the danger of introducing the dreaded disease among our animals.

The Polar bear, "Silver King," suffered for several weeks from acute gastritis, but eventually made a good recovery, although no improvement has taken place in his savage disposition. Taking advantage of "Silver King's" great fondness for cod-liver oil, we had no difficulty in administering the necessary medicines through that medium. Except for the cod-liver oil, not a particle of food was taken for three weeks. "Silver King" came to the Park in 1910, as the gift of the late Paul J. Rainey. As he was fully adult when captured, it is believed that he is now about 22 years old.

All the Galapagos iguanas captured by the Harrison Williams Expedition to the Galapagos Islands, and brought to

the Park in May, developed a peculiar disease of the skin, which completely covered the body. It had all the appearance of sarcoptic mange, but a microscopic examination of the skin lesion failed to find any mange parasite. The iguanas responded well to the treatment, which consisted of dippings in oil solutions of lime and sulphur.

Two jaguars also were found affected with mange, but both of these cases responded well to treatment. Our large and most energetic jaguar, in miscalculating a leap to its shelf, fell and injured its spine, which resulted in producing a partial paralysis of the hind legs. This case is recovering, and eventually will become nearly normal.

The kiang, as a result of an infected wound, developed a cold abscess in the muscles of the chest, and it was necessary to crate and operate on this strenuous animal. Recovery was slow, but satisfactory.

Among the unusual diseases there were two cases of acute laminitis, or inflammation of the sensitive structures within the hoof. The animals affected were the old Grevy zebra and one of the musk-ox calves. As a result of this disease the feet show some deformities, and require frequent treatment. The covering of the floors of their compartments with peat moss, which was kept moist, was a great aid in bringing about complete recovery. Previous to treatment these animals must be rendered harmless by the various methods of restraint which we have at hand. It was necessary to crate the zebra for each treatment, but in the case of the musk-ox, five strong keepers were sufficient to cast and properly secure the animal in order to insure the safety of the patient from injury. The method of securing must necessarily largely depend upon the circumstances and surroundings encountered in each individual case. The temperament, size, strength, age and conformation of the animal must each receive due consideration.

Each of the larger species of wild animals is richly endowed with one or more means of defense, and these are often-times—in individuals of certain temperaments—converted into weapons of offense. Without sufficient means of restraint, the keepers are in danger of bodily harm, while the animal is in danger of self-inflicted injuries, as a result of its own efforts at resistance.



DROMEDARY

Three of these powerful, well-bred animals have been purchased for riding purposes. Bred in Australia by the Government, they present the finest form of development.

Photograph by Elwin R. Sanborn.

The experience of more than twenty years in the close study of the diseases of wild animals in captivity is sufficient to convince me that it is better and simpler to prevent diseases than to cure them, so that our great effort must continue to be directed along the line of preventive medicine and surgery. Whether it is aimed to prevent disease by quarantine measures, by sanitation, or by protective vaccination, the ultimate result hoped for is the guarding of the health of our animals against harmful intrusions.

We are fortunate that in our present knowledge of many of the communicable diseases in wild animals we are in a position to combat the infections by directing our efforts towards their prevention rather than towards their treatment, which in many cases is later a hopeless task. In order to successfully eradicate some of the contagious or infectious diseases among our animals, it is necessary to resort to heroic measures; but in other cases this may be accomplished by other methods. The routine use of suitable disinfectants throughout the various installations is of great value, because these tend to destroy the contagion as it is given off from the body of an afflicted animal, and to greatly diminish the danger of infecting other animals.

DEPARTMENT OF ADMINISTRATION.

H. R. MITCHELL, Chief Clerk and Manager of Privileges;
WILLIAM MITCHELL, Cashier.

The inadequacy of the sum granted by the city for maintenance of the Park for the year 1923 was fully realized by the Executive Committee. We therefore submitted to them for approval a Zoological Society budget for 1923 calling for a contribution by the Society of \$7,845.00. Notwithstanding most careful and painstaking economy in all codes, this sum was not sufficient to carry us through the year, and it was necessary to increase the Society's maintenance deficit appropriation to \$9,470.68. At the same time, we effected a saving of \$1,784.13 in salary codes, owing to time losses and temporary vacancies, which sum reverted to the city.

The Society was again obliged to devote the entire gate receipts for the year, amounting to \$17,290.30, to necessary repairs and improvements, and in addition to that the Society expended a further sum of \$5,000.00 for this purpose from its

income account. The total cost to the Society for 1923 on account of Park repairs and replacements was \$23,388.20.

Some increase in parking space for automobiles was made during the year, along the lines suggested in our report for the previous year. Provisions were made opposite the Buffalo Entrance to accommodate thirty-three cars, and for nineteen cars near the Boston Road entrance. Through the cooperation of Park Commissioner Hennessy, the Crotona Parkway Plaza at the Crotona Entrance was repaved, and put in good condition, adding sufficient space at this point for parking about 31 cars, without interfering with traffic. By these arrangements our parking accommodations were increased by about 50 per cent. This, however, gives only temporary relief. The increase in the number of machines owned by Park visitors seems to have more than kept pace with the expansion in our parking space. There is no question but that the matter of added facilities for this purpose must have careful study in the immediate future.

Other zoological parks and gardens throughout the country, even in cities of moderate size, are having great difficulty, and spend considerable sums of money, in providing accommodations for automobiles. Our problem is exceedingly difficult because Pelham Parkway and the Boston Road, the two great arteries for New York and New England traffic, pass on two sides of the Park.

Accounts: The following new accounts were opened:

Rockefeller Endowment Fund,—to take care of the gift of Mr. John D. Rockefeller, Jr., the income of which is devoted to the general purposes of the Society.

Florence L. Sturgis Account,—bequest of Mrs. Frank K. Sturgis,—the income from which is devoted to the purchase of birds for the Zoological Park and for protection of bird life in general.

The summary statement appearing in last year's report in connection with the Treasurer's statements has been brought down to date, and will be printed again in the same form. The usual quarterly audit of all accounts was made by Marwick, Mitchell & Co., and their certificate of correctness appears immediately following the statements of the Treasurer.

Privileges:—The net results in the Privileges as a whole showed a modest increase over 1922. Some definite progress was made in the program of improvements to be carried on for this department. Most of those of importance will be referred to in detail elsewhere in this report under their proper headings. It will take several years to bring the facilities for the proper handling of the various branches of the Privileges up to the standard we have set for them.

New Refreshment Pavilion:—Early in 1923 plans and specifications were prepared by Wilder & White, architects, for the new refreshment pavilion, authorization for the construction of which was granted by the Executive Committee late in 1922. Approval of the plans in detail was delegated by the Committee to Mr. Sturgis, with power. Some delay was encountered in getting approval of the plans and location of Pavilion by the Municipal Art Commission and Park Commissioners, and in getting estimates from building contractors, so that in spite of our very best efforts the actual construction work could not be started until March 22nd, 1923. The general contract for the pavilion was given to H. H. Vought & Company, who had previously executed several construction contracts in the park, including the animal hospital, with entire satisfaction.

For the second time in connection with buildings for Privilege purposes, it was decided to make this building as permanent as any building previously constructed in the Park. Special consideration was given to the question of the roof. Tile, slate and copper were considered, and copper shingles of varied shades decided upon.

It was hoped that both the construction work and the installation of the equipment could be completed by May 1st, but because of the many different kinds of work to be done, this was impossible. We were, however, able to begin business in the building on June 5th. Acknowledgment of earnest co-operation is due to the following contractors, all of whom gave their very best efforts towards first class workmanship and prompt completion:

General Contractors, H. H. Vought & Co.; Copper Shingle Roof, Anaconda Copper Company, Andrew Whitman; Refrigerating Plan, Automatic Refrigerating Co.; Marble Work,



PAVILION NO. 2 (1899)

This is the old, rustic pavilion that for many years served a useful purpose as a refreshment booth.
Photograph by Elwin R. Sanborn.

PAVILION NO. 2 (1923)
A permanent structure of brick, and of some architectural pretensions has replaced the original pavilion. Modern conveniences of the most advanced type have been installed.
Photograph by Elwin R. Sanborn.



P. M. & W. Schlichter; Tile Floor and Counters, Grueby Faience Tile Company, and Mart and Lawton; Soda Fountain Equipment, L. A. Prouty Co.; Plumbing, David Brandt; Brass Work, Manhattan Brass Company; Decorators, Moeller & Potts; Lighting Fixtures, The Simes Company.

We believe that in the completed building we have as satisfactory a small refreshment-stand arrangement and facilities as can be found elsewhere for Park service. A picture of this building and surroundings is reproduced in this report.

Rocking Stone Restaurant:—It was decided to make a change in the position of steward and head waiter, and after investigation Mr. Antonio Maizzi was engaged. Mr. Maizzi has had a long and varied experience in catering to the public in restaurant service, and he knows the importance of good food and good service.

Various improvements need to be made in the facilities and equipment at the Restaurant, and we intend to carry these into effect as rapidly as the financial results there will justify. The latter part of the season showed a very encouraging improvement.

Boating:—The boating business during the past season clearly showed the advantage of the improvements made the previous year. Some additional improvements were carried out during the year just concluded, the most important of which was the construction of a stone stairway leading to the south end of the dock, replacing the temporary stairs at that point. The new stairway was extended back into the bank, entirely outside of the retaining wall, and in this way added considerable dock space where more room was badly needed. Another very important improvement was the erection of a substantial picket fence entirely enclosing the south end, from the service entrance of the Boat House to the Lake.

The operation of the electric launches has for several years past been the most difficult and unsatisfactory part of the boating business. Our three launches have seen long service, and while we have endeavored to keep them in repair from year to year, they have now reached the point where a thorough overhauling must be given them before they are again put into service.

The entire row-boat equipment was put through our repair shop during the winter. A carload of new steel row-boats was received at the beginning of the season, and orders were placed for another carload to be delivered early in the coming season, to replace equipment that must be discarded.

Boat-House Restaurant:—Several new improvements were made at the beginning of the season, among them the construction of a cork and cement refrigeration room in the cellar adjoining the kitchen on the south. A little later on it is hoped that an automatic refrigerating machine can be installed that will take care of our entire refrigeration problem, but the expense of such equipment could hardly be undertaken at this time. A radio receiving set was installed at the Boat House with two amplifiers, one in the dining pavilion, and the other for the lake. These seem to be appreciated both by our boating and balcony patrons. Evening programs were enjoyed by large crowds, both on the dock and while boating on the lake, where they can be successfully heard at considerable distances.

Guide Book:—Sales of the guide book and profits therefrom showed a very satisfactory increase during the past year. The 7,000 or more copies on hand on the first of January were nearly exhausted by mid season. We arranged for the issue of the eighteenth edition of which 23,000 were printed in August. No revision was made of any importance in the guide book, with the exception of abandoning the flush-cut binding used on all previous editions, and substituting a regular overhang standard book binding. The new book has met with general approval, and in view of the unusually large number of out of town visitors expected in New York during the coming summer, it is doubtful if the eighteenth edition will run through 1924.

Souvenir Books, Postals and Miscellaneous Publications:—The sale of postals showed a very encouraging increase, both in sale and profit for 1923. In fact, our last edition of these cards, which ran to nearly two million, was so depleted at the end of the year that steps must be taken to get out a new issue early in 1924. Plates which are in first class condition will be used, with possibility of our having a limited number of new subjects substituted for the least attractive ones.

The sales of the "Wild-Animal Stamp Primer," "Animals in Art Stamps" and other miscellaneous publications were in excess of the previous year. Arrangements are well under way with a large Chicago publishing concern for the issue of a series of our color process reproduction illustrations of animals, birds and fish for use by schools throughout the country. The plan is meeting with encouragement from educational sources, and the series will undoubtedly be issued on a large scale during 1924. While we do not assume any financial responsibility for this educational service, we are cooperating to make it meet the views of practical educators and hope it will find a large field.

Gate Receipts:—Receipts for admission at the entrances during the year 1923 amounted to \$17,290.30 against \$15,463.60 in 1922, an increase of \$1,826.70. The entire gate receipts were, as in the previous year, placed to the credit of the Improvement and Repair Account, and were expended in emergency Park repairs and improvements which were not provided for in our appropriation from the City.

Soda Water:—Taking into consideration the unavoidable interruption of service at our principal soda stand in front of the Reptile House, due to the destruction of the old open pavilion that had served at this location for more than 20 years, and the construction of a new and modern building, the results shown in this division of the privileges represent all the business that could be carried on. However, the new building was ready for use within about two weeks of the scheduled date, and service facilities and surroundings were so much improved that the volume of business at this location was materially larger than at any previous season, eventually more than making up the early losses, and enabling us to show a net profit larger than that of the previous year.

Riding Animals:—For several years past, the matter of the removal of this business to a new location has been under consideration. It has been difficult to find a place acceptable to the Director and Executive Committee that would meet our immediate practical needs and at the same time provide for the increasing demands of the future. A location in the plot just west of the elephant house was decided upon early in 1923, but it was not found possible to assume the expense of the construction of the necessary facilities during the year. A

study of the ground and our requirements was made, and numerous sketches were prepared so that at the close of the year fairly definite plans were ready to be taken up early in the season of 1924.

A small but substantial building of the most permanent type is proposed for the accommodation of the patrons of this privilege. It is expected that approval of details will be secured in time to begin the work early in the spring of 1924. The temporary discontinuance of the use of our riding elephant made a serious cut in the gross earnings of this branch of the service. It will no doubt be arranged to offset this loss by the purchase of several camels for riding purposes.

Motor Chairs and Baby Carriages:—Fortunately the recommendations in our last year's report in regard to temporary storage facilities for baby carriages at entrances were approved. Early in 1923 two frame buildings, such as are used for double garages, were purchased and erected at the Crotona and Fordham entrances. These were located so as to be as inconspicuous as possible. A lower building was needed at the Boston Road entrance, so it could be erected north of and below the entrance plaza, where it was possible to almost entirely conceal it. These buildings furnish quite satisfactory storage for carriages and wheel chairs, and are of sufficient capacity to take care of our present equipment.

A similar building is needed near the Service Yard for a motor chair, storage and charging station, which would permit of our removing this service from the Shelter Pavilion, where it cannot be properly handled. It is hoped we can add this improvement early in the coming season. During the year we added materially to our equipment in this division, and are now in a position to render better service, and to take care of the demands upon us for the present.

DEPARTMENT OF FORESTRY AND CONSTRUCTION.

HERMANN W. MERKEL, Chief Forester and Constructor; E. H. COSTAIN,
Assistant Forester; MICHAEL E. O'KEEFE, Head Gardener.

The usual routine work of maintenance was carried on as usual during the year, and though the force is totally inadequate to cope with the amount of work necessary, we managed

to keep the park in presentable condition. At times, however, the pressure of work strained the force severely, and had it not been for the Improvement & Repair fund provided by the Society, which was much higher than that of any previous year the park would have suffered greatly.

As conditions were, the cleaning and care of the grounds, roads and walks generally; the raising and distribution of food supplies; the collecting and disposal of garbage; mowing of lawns; planting and maintaining of the Italian Garden and Concourse; the heating of buildings and the many hundreds of jobs that make up the routine of a large Zoological Park were accomplished only under high pressure. Some of this was completed only after waiting long past the time when they should have been done.

With the deteriorations of from fifteen to twenty-five years over the main portions of the Park establishment, the general upkeep is beginning to be a very serious factor indeed. Unless relief in the form of larger repair funds is obtained soon, the expense necessary for belated restorations will be appalling.

Some progress was made in the replacing of old and leaky shingle roofs. The Camel House, Asiatic Deer Barn and one of the Wild Horse Barns were reshingled, and the roofs of the Bronxdale entrance and the second Wild Horse Barn received extensive repairs. Other repairs were made to the roof of the Mammal and Ostrich House, the Antelope House and Small Deer House, and new gutters and leaders were placed on some of those buildings.

The small cages of the Monkey House were given a complete overhauling, as were also all the outside cages of the Pheasant's Aviary. The entire interior of the Antelope House was overhauled and painted. At the Eagle and Vultures Aviary the work of rebuilding the cages was finished, and nearly the entire series was repainted.

At the Primate's House all the brick foundations under the outdoor cages were taken down and relaid. The copper lead-lined gutters which had become useless were replaced by concrete gutters; and the concrete floors were renewed where necessary. The cage fronts and cage partitions were repaired, cleared of rust and repainted, and new ladders, bars and shelves were built in wherever needed.

EASTERN AREA

In the section east of the Bronx River, which was patronized more largely than ever before, the usual policing was supplied. This section becomes more popular every year, and especially during the vacation season, when it is used daily by thousands of children, alone or with their guardians. Being largely forest, that area should receive immediate attention by being supplied with a system of walks. The east river walk which skirts the steep river bank for nearly a mile should not only be rebuilt in proper condition, but for the sake of safety it should be supplied with a strong permanent iron rail throughout its whole length. In addition to all this, one or two storm shelters should be placed in advantageous positions along the walk.

IMPROVEMENTS & REPAIRS

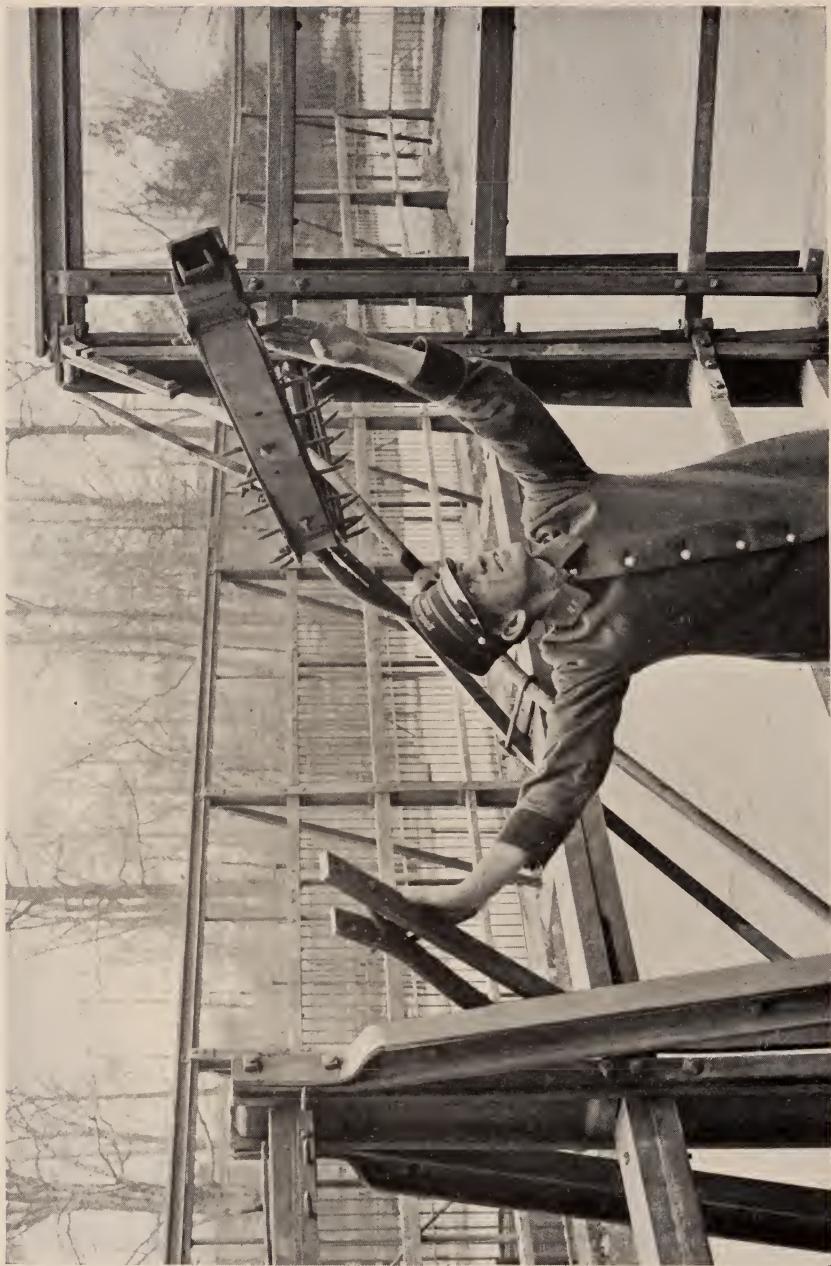
The work done from this fund was larger than that of any previous year, as follows:

Walk Repairs :—53,000 sq. ft. of walks and portions of the Service Road were resurfaced; and new concrete walks were built in front of the Service Building to replace the old wooden walks which had become entirely useless. In the rear of the building a concrete loading platform was erected.

Telephone Manholes :—In order to eliminate the dangerous conditions existing in the underground telephone and electric light cable service, caused by the fact that both telephone and lighting wires entered the same manholes, five new manholes were built, for telephone service only, and the underground cables were deviated into the new manholes. Other manholes, in connection with the drainage system, were built at the Polar Bear Dens and at the Alligator Pool, which later was relined with concrete wherever it was found necessary to stop leaks through fissures in the rock.

At the Lion House the inside cage partition doors and the inside cage storm doors were repaired or renewed as found necessary, as were also the outside wire partitions, which had become more or less dangerous. A new galvanized guard rail was built in front of the outside cages.

Outdoor Elephant Fence :—The fence of the African elephant corral received a thorough overhauling, and there were



AN EXAMPLE OF ELEPHANTINE ENERGY

It is a great pity that the actual strength of an elephant cannot be determined; no doubt it is prodigious. A playful tap from Kartoum's head on the gate of his corral, was a sufficient stimulus to Chief Constructor Merkel to effect such changes as will convince this restless pachyderm that it will be his head and not the gate that will yield at the next attempt.

Photograph by Elwin R. Sanborn.

fixed upon it over two thousand steel spikes to prevent that very destructive and dangerous animal from further wrecking the fence. After reinforcing the one weak spot which the animal soon discovered in our work, this fence is now in a safe condition, no matter how much larger or stronger the animal may grow. Other work was done in the inside cages occupied by this beast, in order to further strengthen them, and to still further safeguard the public.

Hippo Tank:—The floor of the Hippo Tank in the Elephant House was raised three feet. This results in a saving of hot water, and in giving visitors a better view of the animal.

Sea-Lion Pool:—The leaky condition of the Sea-Lion Pool, which made it almost impossible to keep it full of water, compelled the relining of the walls and islands of the entire pool with from eight to twelve inches of concrete; and new concrete steps were built into the tank.

Guard Wires:—All of the guard wires were repaired and renewed as needed.

Boiler Repairs:—New heating boilers were supplied and erected at the Small Deer House, Ostrich and Mammal House, and at the Nursery. New smoke stacks were erected at the nursery and at the crematory, and repairs were made to the heating systems of other buildings. Extensive repairs were made to the fences of the Sambar and Fallow Deer Ranges, and the Park boundary fence was given a great deal of overhauling. On Mountain Sheep Hill many of the outside and partition fences were renewed. Some material for water supply renewals was purchased from this fund, and the force of painters was supplemented from it to some extent. During the busier season the force of park cleaners was supplemented by men paid from this fund, for several days at the beginning of each week.

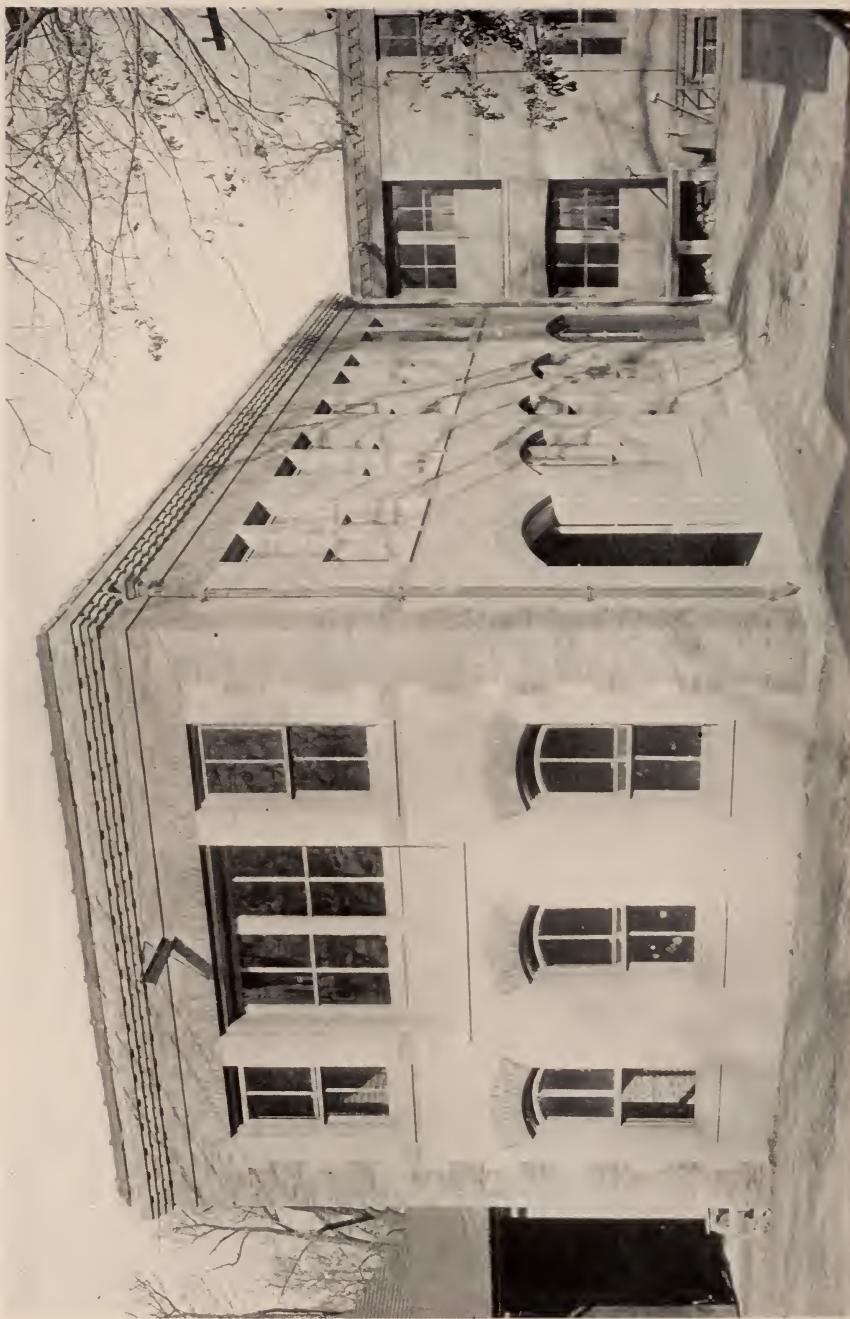
Baby Carriage Store House:—At three entrances, namely Fordham, Crotona and West Farms, store houses for the several hundred baby carriages of the Privilege Department were erected.

In addition to the above many smaller repairs to the water supply, electric lighting and ozonating machines were paid for from the Society's fund, and auto truck No. 3, was furnished with a new and larger body.

FORESTRY BUILDING

Of structural beauty this box-like building has none, but in providing suitable quarters for the painters, blacksmiths and forestry force its utility will more than balance its architectural deficiencies.

Photograph by Elwin R. Sanborn.



CITY BOND ISSUE

A two story brick building, 56 feet by 22 feet was erected in the Service Yard to take the place of the old wooden one-story shed structure that was erected twenty-five years ago. The designs and specifications for this building were prepared by the Chief Constructor and the contract was awarded by the Park Board to the lowest bidder, Dinney-Newgarden & Co., for the sum of \$13,300.00. This building is located in the rear of the Service Building, and in design it is very similar to the other permanent buildings in the yard. The three rooms on the ground floor will be utilized as a paint shop, automobile repair shop and as a central office for the force of men for the maintenance of walks, roads and grounds. The upper floor will be used for storage of tools and as a locker room for the labor force. The heating system still remains to be installed, but plans and specifications have been prepared, and the contract will be let shortly. This building is of fireproof construction, with concrete floors and walls, and connects in the rear with the large steel shed used for the storage of vehicles and structural steel.

The force of this department received a severe loss through the sudden death of Mr. William de Wellworth, for twenty years foreman in charge of the iron and wire working force. Mr. de Wellworth's cheerfulness, faithfulness, great ability, ingenuity and untiring energy had endeared him to every one in the park. Another loss was through the death of William Mucha, for over twenty years a most competent, faithful and hard-working member of the force.

The program of repairs and replacements for 1924 is most serious. It is impossible for the Zoological Society to finance any more than \$15,000 worth of it. The City of New York must provide funds for \$30,000 worth, or it will have to go undone! An application for that sum as an emergency appropriation has been made to the Board of Estimate, and complete specifications and estimates have been filed. Surely a public educational resort which attracts nearly two and one-half million visitors every year should be considered worthy of a repair fund of that small size.



VIEW FROM JUNGLE WALK

When the lush green foliage covers the trees and shrubs in Jungle Valley, the vista across this little lake looking toward the Linnean Bridge is well worth the seeking.

Photograph by Elwin R. Sanborn.

DEPARTMENT OF PHOTOGRAPHY AND PUBLICATION.

ELWIN R. SANBORN, Editor and Photographer; ANNIE NEWMAN, Assistant.

Photography: The photographic collections of the Society are now a reference library for numerous sources of inquiry. For many years artists, illustrators and sculptors have used our photographs extensively as correctives of compositions into which any wild animal life had been introduced; realizing that while a poet might regard a "primrose by the river's brim" as a yellow primrose and nothing more, there were several kinds of bears, and that an ostrich has certain characteristics that could not be treated with the same abandon as a primrose.

Trade-marks that once were grotesque examples of animal portraiture are considered now of sufficient importance to require an authentic picture and not a composite nightmare created in the mind of the designer in the style of a cave-man's wall-painting. A drawing of a lion afflicted with strabismus and bearing a marcelled mane is no longer considered proper even though its ultimate objective is a label for a can of peas.

We have numberless requests for photographs to be used for this purpose, and also for the making of animal toys, building blocks, Noah's Arks, blotters, tablets, calenders, etc.

During the past year we have sent photographs to Italy, France, England, Germany, Holland and even to far-distant New Zealand and Australia. As a fair index of their popularity the following is a list of some of the publications and publishers that have used them as illustrative material: Wereldkronich, Rotterdam, and Wereldrevue, Leiden, Holland; Kosmos, Stuttgart, Germany; The Sphere and Illustrated News, London; English Edition Compton's Pictured Encyclopedia, London; L'Illustration, Paris; Children's Encyclopedia, London; Canadian Forest and Outdoors, Canada; Good Housekeeping, American Magazine, Literary Digest, Gas Logic, Nature Magazine, Current Opinion, Sportsman's Digest, Popular Science, Compressed Air; The Merchants Association, Doubleday, Page & Co., Grolier Society and the Baltimore & Ohio R. R.

The usual needs of the newspapers of New York and elsewhere were supplied and special illustrations were prepared for several text books on zoology and biology, and a new natural history.

Photographs were made also of Nubian giraffe, African pygmy elephant, Indian elephant, African elephant, Indian rhinoceros, Texas white-tailed deer, Mexican white-tailed deer, white-fronted musk-ox, Bactrian camel, American wapiti, Burchell zebra, yak, Eld's deer, Celtic horse, American black bear, hyena, barn owl, flightless cormorant, Galapagos penguin, Galapagos land and marine iguanas and Galapagos tortoise. Construction work on the Forestry Building and new Pavilion at the Reptile House was photographed, as well as various skulls, hoofs and gross specimens for biological work.

At the Aquarium photographs were made of the blue-nose sunfish, red-bellied sunfish, sand shark, bonefish, smooth puffer, brook trout, bowfin, butterfly fish, shark suckers, hog fish, lake sturgeon, gourami, doctor fish, starfish, and crustacean tank.

The following is a recapitulation of the photographic work in 1923:

New Negatives,—Park and Aquarium.....	115
Prints for Publication.....	829
Prints for Miscellaneous purposes.....	1,008
Prints for Index Albums.....	1,131
Enlargements	10
Lantern Slides.....	182
 Total	 3,275

PUBLICATIONS

Bulletin: The usual six issues of the Bulletin were printed in 1923, making a volume of 156 pages with 165 illustrations. Even though good material for this important publication has been difficult to obtain,—a condition probably that is experienced by any periodical,—the standard of excellence has been maintained.

Among the noteworthy contributions secured “The European Bison,” “Hunting in Chiriqui” and “Wild Life on Mt. Elgon” were the more important. The Director of the Park contributed, “The Home of the Tyrant Dinosaur,” important observations on wild life preservation, and the founding of new Zoological Parks.

Mr. Beebe's argosies and the united efforts of the argonauts which he gathers around him have been the means of developing an abundance of matter of educational value, and also of story value to the Bulletin. No matter how great the pressure in other directions, Mr. Beebe continues to be a prolific and helpful contributor.

Miss Helen Keller, who made several visits to the Park, was inspired by her experiences to write of her many associations with wild and tame pets, under the title of "My Animal Friends."

Mr. Eli Harvey secured the commission from the Alumni of Brown University for an Alaskan bear of heroic size to be erected on the campus of that institution and his finished work was a striking portrait in bronze of our great Alaskan bear "Ivan." The details of the campaign of the promotion of that object, and the sculptor's interesting methods of developing his studies, were properly recorded in the Bulletin.

An index of all numbers of the Bulletin from January, 1914, to November, 1922; a total of 54 issues, 1,370 pages and 1,234 illustrations, has been prepared and is being edited and revised for publication. This will make a series of 5 new volumes of the Bulletin which with the two volumes already bound will make a total of 7 volumes, containing 2,430 pages and 2,510 illustrations. It is highly probable that nowhere else in the world can be found any such volume of photographs of mammals, birds, reptiles and fishes as are represented in this wonderful collection on the pages of the Bulletin.

Annual Report: The Annual Report for 1922, after a complete rejuvenation under the direction of President Osborn, appeared in a new binding and with an entire rearrangement of its various documents; making a volume of 220 pages and 23 illustrations.

Zoopathologica: There were no issues of this publication during 1923.

Zoologica: A voluminous amount of material was contributed from various sources to this publication throughout the past year, and 16 numbers were issued. Volume II was completed by the issue of "The Scales of Whitefishes," by Miss Ida Mellen and John Van Oosten; and "The Anderson Tree

Frog"—G. Kingsley Noble and Ruth C. Noble; a total of 84 pages and 18 figures.

An index for Volume II was prepared and is now in type, ready for press. Copies of the index will be mailed to the members of the Society, and the remainder will be bound with the volumes.

Volume III was increased during 1923 by the numbers from 16 to 23 inclusive; a total of 134 pages and 36 figures and plates. The index for this number will be prepared soon and this volume bound, also.

The series, as a whole, covers the work of the Tropical Research Station. Volume IV was started with a paper by C. M. Breder, Jr. and Ruth B. Breder, of 24 pages, eight figures and two charts.

Volume V will be devoted to the collections of the Williams Galapagos Expedition, and already three numbers containing a total of 60 pages and 15 figures and plates, have been completed and mailed.

In addition to the above three numbers, numbers 4 to 16 inclusive have been edited, put into type and paged. Some of these are now on the press—numbers 4 to 11 inclusive—and numbers 12 to 16 inclusive are paged ready for the press. These sixteen numbers comprise 180 pages and 48 figures, plates and tables.

During 1923 a total of 302 pages with 77 figures and plates were completed and printed, and including these with the papers not yet printed but ready for the press, they represent a total of 420 pages and 110 figures and plates for this publication.

Membership: The card index files of the list of members are complete and in good working condition. We are seeking at all times to improve and amplify this important work, and to put it into such a form as to make the data available for any emergency, and readily understood.

Mailing: The mailing of all publications, and other business notices has been improved by constant application, and as thoroughly systematized as is possible. A total of 40,250 pieces of mail were sent out from this Department during 1923.

CONCLUSION

At the present hour (January 1, 1924) the future of the Zoological Park is not rose-colored. We are wondering what the future has in store for it. These are days of swift and great changes. These three questions arose three years ago, and they are yet unanswered:

- (1) Are the people who made the Zoological Park,—as private givers of time and money, and public-taxpayers,—going to support it on a satisfactory scale of merit and efficiency?
- (2) Must it continue as the crippled child of New York institutions, living from hand to mouth, and begging from day to day for the means by which to exist?
- (3) Is the reputation that it has achieved,—as the undisputed leader of the world's zoological parks and gardens,—to be maintained unimpaired and increased, or not?

Thus far the Board of Estimate never has voted even one of our annual budgets for repairs! The appreciation of two and one-half millions of visitors is extremely gratifying, and the compliments of admiring friends are all very excellent to have and to hold, but it takes money to meet monthly bills and payrolls, and nothing but cash will pay for repairs. If our cash income limps or halts in these our first flush days of youth, what will happen to the Zoological Park when it begins to show the pallor of old age?

This is one answer:

The City of New York must make some of these repairs; and the Zoological Society must have the full \$2,000,000 of new endowment money that was called for on January 8, 1922, or New York's famous Zoological Park will from this time henceforth go backward instead of forward.



ROCK BASS (*AMBLOPLITES RUPESTRIS*)

Most of the specimens shown in the photograph have lived in the Aquarium ten years.
Photograph by Elwin R. Sanborn.

REPORT OF THE DIRECTOR OF THE AQUARIUM

By CHARLES H. TOWNSEND

THE principal matter to be reported upon for the year 1923 is the improvement of the Aquarium building. This included the completion of repairs to the roof of the Aquarium proper, commenced in December, 1922, and the construction of a third story at the front or office section of the building, commenced in August, 1923, and still in progress.

The object of the latter improvement is to provide more space for administrative purposes, and a new location for certain mechanical equipment, principally large distributing tanks, originally placed at the rear of the building. The pumping and heating plants having previously been removed to the front basement at the expense of the Zoological Society, the City undertook the construction of the third story. Upon its completion the balance of the machinery will be moved forward and the space thus vacated at the rear converted into exhibition tanks. This will permit of an important increase in the living collections, a matter of decided interest to the public, which visits the Aquarium to the number of about two millions of persons a year.

The enlargements now in progress, together with certain minor improvements being effected in the mechanical equipment, will result in a general increase in efficiency.

A large public aquarium is much more than the simple exhibition hall of water-filled tanks, as generally regarded by its visitors. Its equally large but unseen side consists of a complicated pumping, filtering, heating and cooling plant, connected with several different water systems all in active operation day and night, which when shown occasionally to visitors seldom fails to elicit expressions of surprise.



REBUILDING THE FRONT WALL OF THE SECOND STORY: N. Y. AQUARIUM

The charred ends of the roof beams may be seen above the heads of the bricklayers.

Photograph by M. Rosenfeld.

Its operation is decidedly complicated, some of the employes serving in eight-hour watches, guarding pumps, filters, taking temperatures and constantly observing the flow of water. Accidents affecting the various water systems are liable to result in immediate losses of living exhibits.

The staff of the Aquarium looks forward with lively interest to the completion of the improvements calculated further to safeguard the thousands of living creatures in their care.

At the close of the year we find the third story nearly ready for its roof, the erection of the walls having been delayed several times owing to defects found in the supporting walls of the old second story. The difficulties encountered having been largely overcome, we may expect more rapid progress. With the roof in place, the delays hitherto caused by wintry weather will be avoided.

Dangerous Condition of the Old Second Story:—Plans for the third story now in process of erection, were prepared by McKim, Mead & White, architects, and presented to the City by the Zoological Society. The cost of the plans exceeded \$3,000. The work is being done under the direction of the Commissioner of Parks. The contract for construction, amounting to \$62,000.00, was awarded to the Thomas A. Reilly Co., on August 29, and work was commenced at once. A further contract for plumbing, amounting to \$700.00 was awarded to John Thomas, a few days later.

The work of the contractor had not proceeded far until it was discovered that the walls of the second story were unsafe. The front wall overhanging the entrance had been built on timbers laid on top of the original heavy wall constituting the first story. These timbers having disintegrated, the top of the wall was found to be leaning outward about three inches, thus endangering the approach to the building. It was immediately condemned by the Superintendent of Buildings, and the Board of Aldermen provided a fund of \$9,000. for its removal, reconstruction, and the replacing of its charred wooden roof timbers with steel girders.

Further examination revealed a serious settling of the east wall, which was also condemned and replaced. These and other minor proceedings of a similar nature, naturally served



CHARRED ENDS OF ROOF BEAMS: N. Y. AQUARIUM

The flimsy wall underneath will be taken down and then rebuilt.

Photograph by M. Rosenfeld.

to delay the work of the contractor and involved expenses that could not be foreseen.

The timely undertaking of improving the building, thus served the important purpose of revealing the extensive defects in the old second story, and averting the imminent fall of the front wall and the collapse of the fire-damaged roof timbers it so weakly supported. There appears to be no record of the fire, which at some time in the past had seriously damaged this part of a building now over 100 years old. The accompanying photographs will serve to indicate the serious character of the defects discovered and to relieve the concern of those officials who were not entirely in sympathy with plans calculated to alter the appearance of the ancient structure now devoted to the uses of the Aquarium.

Had the improvement work not been undertaken, it is quite possible that the shaky condition of the front wall might have been revealed only through its collapse, with possibly very serious consequences.

Collections:—The collections of the Aquarium at the close of the year number as follows:

	<i>Species</i>	<i>Specimens</i>
Fishes	116	3,727
Aquatic reptiles	18	99
Amphibians	9	58
Birds	2	2
Mammals	1	1
Invertebrates	16	544

The total number of specimens is 4,431, and of species 162. These figures represent some decreases as compared with those of the preceding year. The decrease in general is due to intentionally lessened effort in collecting, the Zoological Society's consulting engineer, in charge of alterations, having given warning against possible losses of specimens during the necessary readjustment of pipe lines supplying the exhibition tanks. While no losses have occurred as yet, mechanical changes are still in progress which may occasion some losses, and must be accomplished with decided care. Much reliance can, however, be placed on the new aerating equipment, as the temporary stopping of pumps from time to time becomes necessary.

Tropical Fishes:—Having enlarged the collection of local sea fishes, the work of bringing tropical fishes from Florida by steamer has been somewhat reduced. A single large shipment during the past season proved sufficient. This trip was made in co-operation with the Philadelphia Aquarium, the collection consisting of 838 specimens of 55 species. While on this trip, Mr. Mowbray, aquarist in charge, was able to make the photographs, measurements and notes on the rare whale shark, 35 feet long, upon which the American Museum of Natural History has based the construction of a life-sized model now nearly completed. A list of the species brought from Florida will be found under the heading of "Accessions."

Gifts to Other Aquariums:—Ten large horseshoe crabs (*Limulus*) were sent to San Francisco for the opening of the new Steinhart Aquarium in Golden Gate Park, which occurred on September 29. The following were shipped in December by the *S. S. Aquitania*, for the opening of the London Zoological Society's Aquarium in Regent's Park: six mudfish (*Amia Calva*), four long-nosed gar (*Lepidosteus osseus*), and six hell-benders (*Cryptobranchus alleganiensis*). All of these species are confined to North America and are regarded as of decided zoological interest. They are much in demand by the aquariums of Europe.

Water Birds at the Aquarium:—Specimens of the penguin (*Spheniscus mendiculus*) and the flightless cormorant (*Phalacrocorax harrisi*) of the Galapagos Islands are now on exhibition at the Aquarium, having been transferred from the Zoological Park, where they had suffered from lack of sea water. Both birds were given a new lease of life by the transfer and now appear to be in the best of condition, feeding freely on live, salt water minnows, which they capture with great agility. The penguin appeared to take copious draughts of sea water immediately upon its arrival and soon completed the retarded moulting of its dense feathers successfully.

Work of the Collecting Boat:—The Aquarium well-boat *Seahorse* owned by the Zoological Society has now been in service four seasons. Notwithstanding the fact that in previous years the local marine exhibits were maintained without the facilities which this boat represents, it is difficult to imagine the work being done today without it. As a matter

of fact, the varied and interesting marine life of the adjacent coast line never was well represented in our exhibits until this boat was built for collecting service.

During the past summer the *Seahorse* made twelve trips, all to Sandy Hook Bay, which, up to the present time, has been our most productive collecting ground. The fishes obtained, 2,872 specimens, represented 51 different species. Invertebrates to the number of 1,188, representing 12 species, were also secured. In addition much material useful as food, such as menhaden, salt water minnows, snails, crabs and sea weed was brought in each trip. By means of the boat also more than 1,000 gallons of pure sea water was added to the Aquarium reservoir. The *Seahorse* is maintained at the expense of the Zoological Society, at an annual cost of about \$1,200. Having sail as well as engine power, it often is possible to reduce considerably the expense of maintenance.

LIST OF FISHES SECURED AT SANDY HOOK BETWEEN JULY 3 AND
OCTOBER 19 BY THE WELL-BOAT *Seahorse*

- Smooth Dogfish, *Mustelus canis*
Clear-nosed Skate, *Raja eglanteria*
Bluefish, *Pomatomus saltatrix*
Weakfish, *Cynoscion regalis*
Menhaden, *Brevoortia tyrannus*
Summer Flounder, *Paralichthys dentatus*
Spot, *Leiostomus xanthurus*
Blackfish, *Tautoga onitis*
Puffer, *Spherooides maculatus*
Common Sea Robin, *Prionotus carolinus*
Butterfish, *Rhombus triacanthus*
Porgy, *Stenotomus chrysops*
Red-winged Sea Robin, *Prionotus strigatus*
Sea Bass, *Centropristes striatus*
Yellow Mackerel, *Caranx crysos*
Sand Shark, *Carcharias littoralis*
Pampano, *Trachinotus carolinus*
Kingfish, *Menticirrhus saxatilis*
Pilotfish, *Naucrates ductor*
Striped Bass, *Roccus lineatus*
Cow-nosed Ray, *Rhinoptera bonasus*

- Sting Ray, *Dasyatis centrura*
Long-finned Harvestfish, *Rhombus paru*
Orange Filefish, *Aleutera schoepfii*
Thread Fish, *Alectis ciliaris*
Billfish, *Tylosurus marinus*
Silver Moonfish, *Selene vomer*
Massachusetts Filefish, *Monacanthus hispidus*
Hammerhead Shark, *Sphyraena zygaena*
Crevalle, *Caranx hippos*
Common Skate, *Raja erinacea*
Spiny Boxfish, *Chylomycterus schoepfi*
White Perch, *Morone americana*
Tomcod, *Microgadus tomcod*
Common Mullet, *Mugil cephalus*
Eel Pout, *Zoarces anguillaris*
Spotted Codling, *Urophycis regius*
Horned Dogfish, *Squalus acanthias*
Ten-pounder, *Elops saurus*
Croaker, *Micropogon undulatus*
Common Toadfish, *Opsanus tau*
Big Skate, *Raja ocellata*
Eighteen-spined Sculpin, *Myoxocephalus octodecimspinosus*
Pinfish, *Lagodon rhomboides*
Alewife, *Pomolobus pseudoharengus*
Common Eel, *Anguilla chrysypa*
Pipefish, *Siphonostoma fuscum*
Spearing, *Menidia notata*
Common Killifish, *Fundulus heteroclitus*
Bass Killifish, *F. majalis*
Windowpane Flounder, *Lophopsetta maculata*

The Sand Shark and Its Companions:—The much-photographed sand shark died during the fall, after having spent over three years in the Aquarium. Fortunately the Seahorse brought in another, slightly smaller specimen, which replaces it and furnishes the shark suckers and pilot fishes a new host. The natural association of these widely different species is one of the remarkable facts of zoology.

An Ecological Exhibit:—During the year an exhibit was prepared of a tide pool group alongside a small fresh-water group, with a view to comparing the faunas of the two environments. Considerable favorable comment has been made upon

it, especially by biology teachers. The more prominent organisms exhibited in the two tanks are as follows:

<i>Salt Water</i>	<i>Fresh Water</i>
Small lobsters	Crayfish
Shrimps	Fresh-water mussels
Hermit crabs	Snails
Soft clams	Sunfish
Mussels	Catfish
Mud snails	Yellow perch
Hard clams	Minnows
Sea anemones	Killifishes
Bass killifishes	Tadpoles
Common killifishes	Newts
Sheepshead minnows	Small turtles

These have been grouped together in as nearly natural proportions as possible, amid appropriate plants and rock work. It is merely suggestive, however, of what might be done to make the various exhibits more attractive and instructive if funds were available for incidental expenses.

Seals—Both female sea lions and the harbor seal died during the fall, from pneumonia. The remaining old male sea lion appears to be in undiminished vigor, although disturbed by the noise and commotion made by the contractors in their work. Doubtless the cold draughts and noise of this work aided in the destruction of the other three mammals. Yet it is not so remarkable that they died, as that they lived as long as they did under the unnatural conditions imposed on them at the Aquarium. The large male has completed his sixteenth year of life in the building.

White Perch—One hundred and sixty-five white perch were taken from Prospect Park Lake. This was the first collection from that body of water in several years and this addition will no doubt be of greater value shortly, as the large specimens on exhibition are possibly approaching the limit of their normal span of life, having lived in the Aquarium ten years. The age of the latter is not known, as they were adults when received. The white perch inhabits both fresh and salt water.

Eels to Denmark—By way of experiment, Mr. Mowbray, chief aquarist, shipped two eels just out of the larval stage in a six ounce bottle about half full of water, to Dr. Johs. Schmidt of the Carlsberg Laboratory at Copenhagen. The remainder of the bottle was charged with oxygen. Both specimens survived the trip.

Lampreys—In the spring, Mr. Breder, assistant aquarist, made a trip to Red Bank, New Jersey, to obtain information on sea lampreys, at that time ascending the rivers to spawn. An account of this appeared in the July *Bulletin*. As death follows naturally after spawning, and the lampreys were at the height of their breeding season, no attempt was made to bring back living specimens; but about two hundred preserved specimens were given to the New York University, for class work in comparative anatomy.

Specimens presented—Mr. C. O. Hayford, Superintendent of the New Jersey State Fish Hatchery at Hackettstown, presented on behalf of the State Board of Fish Commissioners numerous adult specimens of brook, rainbow and brown trout.

Brook Trout—Mr. Rowland Hazard of the Eastern Trout Growers' Association presented the Aquarium with twelve large brook trout.

Mounted Fishes—The Florida East Coast Hotel Company of this City presented the Aquarium with five mounted Florida game fishes: sailfish, grouper, tarpon, bonefish, and amberjack.

Fishes in Park Lakes—With a view of stocking lakes in the parks of the City with certain fishes not found there, the Aquarium placed 24 calico bass in Prospect Park lake, and the same number in the lake at Fifty-ninth Street, Central Park. Nine European tench were also placed in the latter lake, in the hope of establishing a stock to be drawn upon in the future. In addition to these, a new supply of young yellow perch hatched in the Aquarium were planted in Prospect Park lake. Several of the Park lakes continue to supply specimens of the common fresh-water fishes introduced years ago by the Aquarium.

Collections Made by Employes—Certain of the commoner fresh-water fishes were taken with nets by the employes of the Aquarium in the lakes of Central Park and in Prospect Park Lake, Brooklyn. The species represented were pearl roach,

common sunfish, goldfish, fresh-water minnows, white perch, yellow perch, catfish, black bass and carp.

They also collected marine invertebrates consisting chiefly of sea-anemones, starfish and mussels, which were used in stocking small marine aquaria around the large, central pool. Some of the mussels were used as fish food.

Specimens Received by Exchange:—An exchange made with the Fairmount Park Aquarium in Philadelphia brought to New York numerous specimens of calico bass and native roach, with smaller numbers of sunfish, catfish and goldfish.

Electric Pumping Plant:—The Aquarium has had the benefit of a second year's service of this admirable equipment, the gift of the New York Zoological Society. It has operated both smoothly and effectively. The pumps for each of the four water systems being in duplicate, it has been possible to shift without delay, service from one pump to another in case of necessity. It has also made possible the use of employes in this department for considerable plumbing and mechanical repair work. Owing to favorable weather conditions, only two of the three low pressure boilers were needed during the closing months of the year for heating the building and warming sea water. In midsummer all boilers were placed out of service for three months, which resulted in an important saving in fuel.

Pipe Lines to Reservoir:—One of the large, lead-lined pipes in the shallow tunnel between the salt water reservoir and the Aquarium, where it cannot be cared for, has, after many years' service, rusted out and is in need of immediate renewal. The cost of this work has been estimated at \$300. It may be possible to enlarge the tunnel and thus provide for the regular inspection of such water lines.

Refrigerating Plant:—During about five of the summer months, when the fresh-water supply becomes too warm for trouts and other northern fishes, its temperature is reduced by artificial means.

The large ammonia coil used in a fresh-water distributing tank, having become heavily corroded, was taken out for repairs. Its removal, cleaning, regalvanizing and replacement were effected at a cost of \$350. As new coils of this pattern

cost about \$800. and become corroded after three or four years' service, considerable expense was avoided by the above treatment, the old coil being otherwise in sound condition.

Painting Done by Employes:—Much of the annual repair work of the Aquarium is done by the so-called "attendants." During the year they not only repainted the columns and parts of the interior of the main exhibition hall, but scraped and repainted several thousand feet of pipe lines. This annual proceeding averts deterioration by rust, and means a decided saving in the cost of maintenance.

Temporary Outside Office:—When the necessity of re-building certain walls of the second story became apparent, the director, with approval of the Chairman of the Executive Committee, rented a single office room in the Maritime Building, at 21 Pearl Street, at a cost of \$100. a month. The Department of Parks having no funds for this purpose, the rental has been paid by the Zoological Society.

Most of the library and office equipment were stored in the attic of the Aquarium, lockers being constructed by the employes, for the safe keeping of smaller things of value.

Aquarium Fish Hatchery:—This exhibit, which is maintained during the greater part of each year, is not only interesting and instructive to visitors, but yields considerable quantities of young fry for state waters. The species hatched in 1923 included 800,000 whitefish fry sent to Lake Champlain; 13,000 rainbow trout fingerlings and 3,000 lake trout fingerlings sent to Palisades Interstate Park; 100,000 yellow perch fry, deposited in Prospect Park Lake, Brooklyn. The yellow perch fry were reared from eggs laid in the Aquarium tanks.

There remained in the hatchery on December 31, 45,000 eggs of brook trout and 17,000 eggs of brown trout presented by the Tuxedo Park Club; 5,000 rainbow trout fry and 5,000 eggs of chinook salmon. With the exception of the trout eggs received from the Tuxedo hatchery, and the yellow perch eggs, all of the above were received from the United States Bureau of Fisheries.

Publications:—Papers in *Zoologica*—"The Whitefishes (*Coregonus clupeaformis*)" consisting of two papers, "Whitefishes Reared in the New York Aquarium," by Ida M. Mellen,

and "A Study of the Scales of Whitefishes of Known Age," by John Van Oosten. This publication illustrates the exactness with which the age of a whitefish may be read in the rings in its scales, and is based largely upon a study of scales of whitefishes reared in the New York Aquarium; the only ones ever reared from egg to maturity in aquarium tanks, and therefore the only specimens whose age is definitely known. These fishes, hatched in January, 1913, are now nearly 11 years old. Scales were removed from living, segregated specimens, every 30 days for one year, and studies made of the monthly and yearly growth records upon the scales.

Miss Mellen syndicated a series of 24 articles on What You Do Not Know About Fish, in various newspapers throughout the country, and will bring these out in book form during 1924, illustrated in part with some of the splendid photographs of fishes taken in the Aquarium by Elwin R. Sanborn and loaned by the Society.

The director of the Aquarium prepared a lengthy article on fresh-water fishes, entitled Our Heritage of the Fresh Waters, which was published in the August number of the National Geographic Magazine. The article was illustrated with photographs and colored plates of fishes living in the Aquarium. The edition of this number of the magazine was 830,000 copies. He also furnished the material for an article in the American Magazine on modern deep-sea exploration, which was published in the August number. He had previously prepared an article on the same subject for the new Encyclopedia Americana.

Budget for 1924:—The fund provided by the City for the maintenance of the Aquarium is \$58,309., a decrease of \$917. as compared with that of the preceding year.

Attendance:—The number of visitors to the Aquarium during the year 1923 was 1,813,647, an average of 4,969 a day. This is a decrease of 308,249 as compared with the preceding year, and is doubtless attributable to the reconstruction work commenced in August and still in progress. It became necessary to close the front entrance during most of this period, visitors being admitted at the less convenient rear entrance. Moreover, for a few weeks the temperature of the building could not be maintained at a comfortable degree.

ATTENDANCE AT THE NEW YORK AQUARIUM BY MONTHS, 1923

January	Visitors.....	71,501	Daily average.....	2,307
February	"	68,313	" "	2,440
March	"	114,997	" "	3,710
April	"	158,465	" "	5,283
May	"	178,253	" "	5,750
June	"	197,693	" "	6,589
July	"	280,692	" "	9,054
August	"	268,744	" "	8,669
September	"	185,917	" "	6,197
October	"	114,867	" "	3,705
November	"	84,112	" "	2,804
December	"	90,093	" "	2,906
<hr/>				
Total	"	1,813,647	" "	4,969

RECORD OF MONTHLY MEAN TEMPERATURES AND SPECIFIC GRAVITIES OF THE WATER OF NEW YORK HARBOR AT THE BATTERY IN 1923*

	Temperature	Specific Gravity
January	40°	1.014
February	37°	1.014
March	38°	1.012
April	41°	1.009
May	50°	1.011
June	60°	1.014
July	66°	1.015
August	69°	1.016
September	69°	1.016
October	64°	1.015
November	55°	1.014
December	50°	1.010

These records respecting conditions affecting the water of the Harbor at the Battery, have been kept for more than twenty years and appear to be the only records of the kind available for the New York region. They have not only furnished information useful to the Aquarium, but have proved of service to both City and Federal engineers.

* From daily observations made at the New York Aquarium by Mr. A. H. Clendening. Specific gravity observations made with samples of water brought to 60° Fahrenheit.



TOWER ISLAND: GALAPAGOS ARCHIPELAGO

Large colonies of Forked-Tailed Gulls bred on the lava rocks in the shelter of thorny cactus.

Photograph by John Tee-Van.

REPORT OF THE DIRECTOR
DEPARTMENT OF TROPICAL RESEARCH
By WILLIAM BEEBE

HARRISON WILLIAMS, Patron and Curator of Oceanography; WILLIAM BEEBE, Director of Scientific Work; WILLIAM MORTON WHEELER, Entomologist; JAMES F. MITCHELL, Surgeon; ROBERT MCKAY, Executive Officer, Game Fish; JAMES F. CURTIS, Curator of Dredging and Diving; WILLIAM H. MERRIAM, Chief Hunter; HARRY HOFFMAN, Marine Artist; JOHN TEE-VAN, Photographer; ISABEL COOPER, Scientific Artist; RUTH ROSE, Historian, Curator of Catalogues and Live Animals; GILBERT BROKING, Artist and General Preparateur; HAMILTON FROBISHER, Physician; WALTER ESCHERICH, Taxidermist.

THE outstanding achievement for the year 1923 was the Harrison Williams Expedition to the Galapagos Archipelago. This stands as the Seventh Expedition of the Department of Tropical Research of the New York Zoological Society. Through the generosity of Mr. Harrison Williams the 250-foot steam yacht *Noma* was chartered for the purpose, and left New York on March 1st on a cruise of two and a half months under the direction of William Beebe.

Less than six thousand minutes were actually spent on the islands themselves, and yet a very remarkable number of specimens were collected, and thorough investigations were carried out.

A total distance of nine thousand miles was steamed, and the equator crossed eight times. Twenty-one days were spent among the Galapagos Islands. To the living collections of the New York Zoological Park were added nine mammals, twenty-seven birds, and forty-two lizards, notable among which were flightless cormorants, Galapagos penguins and hawks, and giant marine and land iguanas peculiar to the archipelago and never before exhibited alive. For the American Museum there was collected material for two lizard groups, *Amblyrhynchus* and *Conolophus*, including vegetation, rocks, shells, photographs and sketches, together with a giant tortoise, eighteen lizards and a family of sea-lions.

For study by the Department of Tropical Research of the Zoological Society, there was collected:

- 90 water colour paintings by Isabel Cooper.
- 40 oil paintings by Harry Hoffman.
- 46 pen and ink drawings by Gilbert Broking.
- 400 photographs and 11,000 feet of motion picture film by John Tee-Van.
- Many nests and eggs.
- 150 reptiles.
- 200 fish.
- 3,000 insects.
- 40 jars of specimens.
- 60 vials and jars of plankton.
- 200 microscope slides of plankton.
- 100 specimens of plants.
- 300 pages of narrative, records, notes and catalogues by Ruth Rose.

This material is remarkable both for its rarity, excellent preservation, and for the fact that it was collected within such a short period of time.

It is impossible to comment individually on the work of the various members of the party, for there was only one level of effort and achievement, which reached its maximum with the first day in the field, and was sustained without cessation until the expedition ended.

Within six months after our return, there were actually published, or nearing completion, the following twenty-two scientific papers by specialists of the various groups enumerated:

- Heterocera, by Schaus
- Biological Notes on Heterocera, by Beebe
- Pisces, by Nichols
- Apterygota, By Folsom
- Homoptera, by Osborn
- Mallophaga, by Ewing
- Diptera, by Johnson
- Arachnida and Neuroptera, by Banks
- Formicidae, by Wheeler
- Triungulids, by Brues
- Chilopoda, by Chamberlin

- Termites, by Emerson
Coccidae, by Morrison
Brachyurian Crabs, by Rathbun
Macrura and Anomura, by Schmitt
Heteroptera, by Barber
Aves, by Beebe
Coleoptera, by Mutchler
Hymenoptera, by Rohwer
Copepoda, by Wilson
Entomostraca, by Pearse
Isopoda, by Van Name

These are published in *Zoologica*, the scientific publication of the New York Zoological Society.

Early in February, 1924, the narrative volume of the Expedition will be published under the auspices of the Zoological Society by G. P. Putnam's Sons. Its title will be "Galapagos: World's End," by William Beebe. Illustrated by many colored plates and photographs.

The preparation of this elaborate volume has occupied the time of the staff since the return of the expedition.

During this time considerable advance has been made in preparing the British Guiana material for publication. The entire collection of Lepidoptera from the quarter of a square mile of jungle at Kartabo has been classified and named by Dr. Schaus of Washington, showing a total of about twelve hundred and fifteen species of butterflies and moths. These have been arranged by Harold Tappin, a new member of the staff.

The following publications have appeared:

CONTRIBUTIONS OF 1922

(Continued from page 88, XXVII Annual Report, N. Y.
Zoological Society.)

- 127 A New Subgenus of *Myrmicinae*
William Morton Wheeler
American Museum Novitates, No. 46
- 128 Neotropical Ants of the genus *Carebara*
William Morton Wheeler
American Museum Novitates, No. 48



HARRISON COVE: GALAPAGOS ARCHIPELAGO

This cove is on the northwest shores of Indefatigable Island.
Photograph by John Tee-Van.

- 129 Observations of *Gigantiops destructor*
William Morton Wheeler
Biological Bulletin, XLII, No. 4, p. 185

CONTRIBUTIONS OF 1923

- 130 The Leisurely Sloth
William Beebe
Zool. Soc. Bull. XXVI, No. 1, page 13
- 131 Parrot Feathers and Pueblo Indians
Elsie Clews Parsons
Zool. Soc. Bull. XXVI, No. 2, page 40
- 132 The Williams Galapagos Expedition
William Beebe
Zool. Soc. Bull. XXVI, No. 2, page 41
- 133 Résumé and Narrative of the Williams Galapagos Expedition
William Beebe
Zool. Soc. Bull. XXVI, No. 3, page 51
- 134 New Kartabo Batrachians
G. Kingsley Noble
Zoologica, Vol. III, No. 14, page 289
- 135 New Kartabo Lizards
G. Kingsley Noble
Zoologica, Vol. III, No. 15, page 301
- 136 *Descriptiones Termitium in Anglorum Guiana Reptorum*
F. Silvestri
Zoologica, Vol. III, No. 16, page 307
- 137 New Termitophilus Coleoptera
William M. Mann
Zoologica, Vol. III, No. 17, page 323
- 138 Glandular Structure of a Termite Guest
N. E. McIndoo
Zoologica, Vol. III, No. 18, page 367
- 139 Termitophilus Aptyygota
J. W. Folsom
Zoologica, Vol. III, No. 19, page 383
- 140 Three New Termitophis
Harold Morrison
Zoologica, Vol. III, No. 20, page 403

- 141 Four Termitophilus Millipedes
R. W. Chamberlin
Zoologica, Vol. III, No. 21, page 411
- 142 A Termitophilous Braconid
Charles T. Brues
Zoologica, Vol. III, No. 22, page 427
- 143 Two Myrmecophilous Phoridae
Charles T. Brues
Zoologica, Vol. III, No. 23, page 435
- 144 My Jungle Table
William Beebe
Atlantic Monthly, July, page 21
- 145 Galapagos Reptiles and Birds
William Beebe
Zool. Soc. Bull. XXVI, No. 5, page 99
- 146 A New Collection from Venezuela
William Beebe
Zool. Soc. Bull. XXVI, No. 5, page 107
- 147 Capturing a Giant Tortoise
John Tee-Van
Zool. Soc. Bull. XXVI, No. 5, page 123
- 148 A Chain of Jungle Life
William Beebe
Atlantic Monthly, October, page 492
- 149 Galapagos, Isles of the Tortoises
William Beebe
Asia, XXIII, No. 11, page 808
- 150 A Midnight Beach Combing
William Beebe
Atlantic Monthly, November, page 639

PROSPECTS FOR 1924

Staff:

WILLIAM BEEBE, Director.
ALFRED EMERSON, Assistant Director.
JOHN TEE-VAN, Research Assistant and Cinematographer.
WILLIAM MERRIAM, Assistant in Field Work.
HAROLD TAPPIN, Assistant in Entomology.
HERMAN ROGERS, Assistant in Photography.
HARRY HOFFMAN, Artist.
ISABEL COOPER, Scientific Artist.
HELEN TEE-VAN, Assistant Scientific Artist.
RUTH ROSE, Historian and Technicist.
KATHERINE ROGERS, Assistant in Microscopy.
SERGE CHERTYRKIN, Assistant Field Naturalist.

With this unusually capable staff Expedition Number Eight is planned for the early part of the year to the Society's Tropical Research Station at Kartabo, British Guiana, for the purpose of completing the study of the fauna of the quarter square mile of jungle. This material will be worked up on our return, and a number of important Guiana papers brought out.

Upon invitation of the British Guiana government a large and representative exhibition of Miss Isabel Cooper's paintings of wild jungle life and of photographs taken at Kartabo, will be sent about April 1st and installed at the Empire Exposition in London.

Late in 1924 it is expected that the large steamer which Mr. Harrison Williams is planning for exploration and scientific research will be in commission and ready for service.

RED FOX

With the poet who wrote "the snow—the beautiful snow," the fox thoroughly concurs. When all the world is shivering the fox is then at his best with a fur coat where it honestly and properly belongs.



REPORT OF
THE PENSION BOARD
TO THE BOARD OF MANAGERS

THE progress and usefulness of the Pension Fund of the New York Zoological Society for the past year has been fully in keeping with the record made heretofore. Its financial condition is satisfactory and the benefits to members are a source of gratification to the Board.

No changes were made in the personnel of the Board which continued to function with Wm. Pierson Hamilton as Chairman, Lewis Rutherford Morris, Vice-Chairman, Cornelius Agnew as Treasurer with H. R. Mitchell as assistant and Hermann W. Merkel as Secretary.

The loss by death of three members who had retired on pensions occurred. Henry Barloch, Anna F. Stanbury and Owen McCabe. Two employees, Thomas Enright with a record of 23 years, 6 months, 9 days employment in the New York Zoological Park, retired on a pension at the age of 78 years and Joseph Liebel with 17 years and 2 months to his credit, retired at 81 years of age.

A widow's pension was granted to Dora de Wellworth, widow of William de Wellworth, for many years a very valuable employee of the New York Zoological Park. The number of people receiving pensions remains at thirteen, as in the past two years. The total of the Pension Roll shows a slight increase, namely \$14.69 per month. Eight former employees retired from the Fund because of their leaving the services of the Zoological Society, and one member, Thomas Dwyer died. The sum of \$992.32 was paid out in refunds to the retiring members, same being dues paid in by them, plus accrued compound interest at three and one-half per cent. interest. This refund, however, relieved the Pension Fund of accumulated services of 37 years. Dues collected from employees show an increase over the previous year of \$75.47,

while the earnings from interest on the investments showed an increase of \$765.77, while disbursements for pensions increased but \$188.19 for the same period.

The total expenses administering the pension system, such as the examinations by physician, printing and clerical services amounted to only \$407, and for the first time in the history of the Fund the accumulated balance available for pension payments exceeds the original \$100,000 donated by Mr. Carnegie for the purpose of establishing the pension system, as the total amount available on December 31, 1923, is \$100,624.18, showing a net gain for the year of \$10,394.61 which, although not as great as the previous year is well above the average for the last nine years.

In submitting this report the Board feels that the Zoological Society and especially its employees, are to be congratulated on the splendid condition of the Fund, which condition is due largely to the wise handling of the funds by the Zoological Society's Finance Committee, the very low cost of administration and the careful and equitable observance by the Board of all of the rules laid down for its guidance. The Board feels certain that with its present income it will be able to take care of all pension liabilities under the present rules, but trust, that in the near future, substantial donations will enable it to recommend an increase of pensions, which are at the present time too low to enable a pensioner to subsist on them.

Respectfully submitted,

LEWIS RUTHERFURD MORRIS,
Vice-Chairman, Pension Board.

HERMANN W. MERKEL,
Secretary, Pension Board

FINANCIAL SUMMARY

The financial administration of the Zoological Society is under the Treasurer, the Executive Committee and the Finance Committee.

The *City Funds* are derived under the vote of the Board of Estimate and Apportionment, from the City of New York, as follows:

City Zoological Park Building Fund
Zoological Park Maintenance Fund
Aquarium Maintenance Fund
City Aquarium Building Fund

The total appropriation by the City for these purposes during the year 1923 was \$409,741.00, which was expended as accounted for in this Report.

The *Zoological Society Funds* are divided into:

(1) The "Endowment Funds," including:

General Endowment Fund.....	now totaling	\$510,343.90
Sage Endowment Fund.....	"	606,153.25
Rockefeller Fund	"	500,000.00
George F. Baker Endowment Fund.....	"	100,000.00
Cadwalader Endowment Fund.....	"	20,000.00
Florence Lydig Sturgis Fund.....	"	10,000.00
Stokes Bird Endowment Fund.....	"	5,056.46
Carnegie Pension Endowment Fund.....	"	100,066.25

(The above amounts are as of December 31, 1923)

(2) "Special Funds," including gifts from year to year from members and friends of the Society, which are divided into accounts as follows:

Animal Account, for 1923, derived from special endowment gifts and receipts of privileges.....	\$21,877.80
Art Gallery Account, for the purchase of Animal Paintings	(No receipts during 1923)

The Society's funds and gifts also include:

(3) The Park and Aquarium building accounts, derived either from gate receipts, special contributions or from its endowment. The expenditures from these building accounts for the past year were as follows:

Zoological Park Improvement and Repair Account,

derived by authority from Gate Receipts..... \$23,388.20
and (4) The "Scientific Research and Publication Fund" divided as follows:

1923 EXPENDITURES ON EXPLORATION AND PUBLICATION

Publication Account	\$10,742.16
Tropical Research Station Account.....	10,005.85
Library Account	919.94
Heads and Horns Collection Account.....	1,550.69
Expedition to the Galapagos Islands, financed by Harrison Williams as a gift to the Society; expended to date.....	98,670.00

This financial summary shows that during the year 1923 from endowment, from contributions and from publication funds the Society has expended a grand total of \$138,645.68. For the continuation of this work, of such great public benefit in the Park and Aquarium, and of such great scientific and literary value in its publications, the Society requires the immediate addition of \$2,000,000 to its general endowment and the constant attention of its members and friends for the needs of its Library, of its Heads and Horns Collection, of its Publications, of its Animal Painting Gallery, etc.

Communications and contributions to the Endowment Fund or Building Fund should be addressed either to the

Secretary of the New York Zoological Society, 101 Park Avenue, or to the

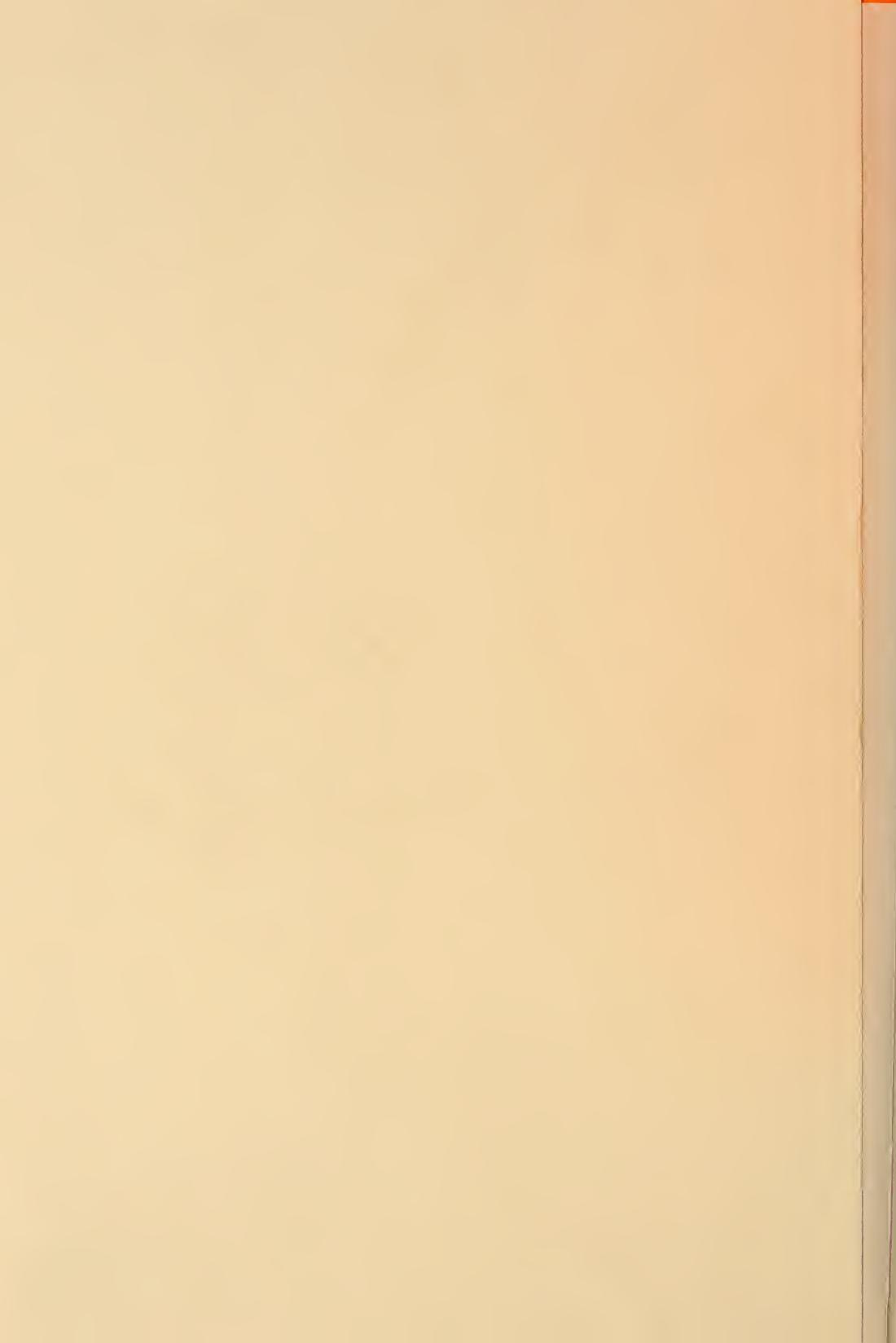
Treasurer of the New York Zoological Society, care Farmers' Loan and Trust Company, 20-22 William Street.

The form of gift or bequest is printed on page IX of this report.

STATEMENT OF FUNDS PROVIDED BY
 THE VARIOUS CITY ADMINISTRATIONS FOR THE DEVELOPMENT AND
 MAINTENANCE OF THE ZOOLOGICAL PARK AND AQUARIUM
 FROM THE ORGANIZATION OF THE SOCIETY TO THE PRESENT
 1896 to 1924

MAYOR	COMPTROLLER	Year	MAINTENANCE		CORPORATE STOCK ISSUES	
			Park	Aquarium	Park	Aquarium
Robert A. Van Wyck 1898-1901	Bird S. Coler 1898-1901	1899	\$30,000.00	.....	.....	.....
		1900	40,000.00	.....	\$125,000.00	.....
		1901	65,000.00	.....	300,000.00	.....
		1902	85,000.00	\$ 5,959.97	250,000.00	.....
Seth Low 1902-1903	E. M. Grout 1902-1903	1903	104,965.00	46,453.68	250,000.00	\$ 30,000.00
		1904	104,965.00	46,439.72	275,000.00	40,000.00
G. B. McClellan 1904-1909	E. M. Grout 1904-1906 Herman A. Metz 1907-1909	1905	134,965.00	44,968.50	275,000.00	.....
		1906	144,965.00	44,987.71	250,000.00	.....
		1907	141,558.75	44,183.87	100,000.00	.....
		1908	154,627.00	44,157.27	65,000.00	.....
		1909	162,325.00	45,971.44	10,000.00	.....
		1910	167,632.00	45,974.86	89,500.00	.....
W. J. Gaynor 1910-1913	W. A. Prendergast 1910-1913	1911	174,632.00	47,560.21	155,000.00	.....
		1912	182,365.00	46,597.08	.....	29,100.00
		1913	191,925.00	47,335.62	.....	.....
		1914	200,000.00	46,995.53	.....	.....
Ardolph L. Kline 1913	W. A. Prendergast 1914-1917	1915	200,000.00	46,991.66	21,425.00	.....
		1916	197,074.35	46,996.43	.....	.....
		1917	199,560.00	46,903.61	.....	.....
		1918	207,586.00	48,630.71	.....	.....
J. P. Mitchel 1914-1917	C. L. Craig 1918 to date	1919	190,000.00	45,000.00	.....	.....
		1920	250,098.27	53,971.48	15,000.00	.....
		1921	276,951.01	65,203.12	.....	25,000.00
		1922	264,618.05	63,341.26	.....	86,000.00
		1923	264,515.00	59,226.00	.....	.....
		1924	264,514.49	58,309.00	.....	.....
		Totals	\$4,399,841.92	\$1,092,158.73	\$2,180,925.00	\$210,100.00

Note! The appropriations for each year are granted by the Board of Estimate the previous year.



SUMMARY OF EXPENDITURES, 1896 to 1923, NEW YORK ZOOLOGICAL SOCIETY AND THE CITY OF NEW YORK
 ON ACCOUNT OF THE DEVELOPMENT AND MAINTENANCE OF THE ZOOLOGICAL PARK AND THE AQUARIUM, INCLUDING THE
 PURCHASE OF COLLECTIONS AND ALSO FOR THE SCIENTIFIC AND GENERAL PURPOSES OF THE SOCIETY.

Year	EXPENDED BY THE CITY OF NEW YORK			FROM GATE RECEIPTS		EXPENDED BY THE NEW YORK ZOOLOGICAL SOCIETY										
	Zoological Park Maintenance	Aquarium Maintenance	Bond Issues a/c—Park and Aquarium	Construction and Repairs	Purchase of Animals	Zoological Park Development	Aquarium Improvements	Zoological Park Maintenance	Aquarium Maintenance	Purchase of Animals	Aquarium Specimens	Heads and Horns Collection	Pension Fund Contribution	Library and Paintings	Scientific and General Purposes	
1896	.....	.....	.....	.....	.....	\$ 4,213.63	.....	.....	.....	.....	.....	.....	.....	.....	\$ 2,903.74
1897	.....	.....	.....	.....	.....	6,424.61	.....	.....	.....	.....	.....	.....	.....	.....	4,339.20
1898	.....	.....	.....	.....	.....	23,597.80	.....	\$ 1,292.16	.....	.....	.....	.....	.....	.....	3,476.02
1899	\$ 30,000.00	.....	.....	.....	.....	145,495.80	.....	7,038.61	.....	\$ 8,540.72	.....	.....	.....	.....	88.13
1900	40,000.00	.....	\$ 125,000.00	.....	\$ 2,470.88	34,626.24	.....	6,189.33	.....	3,784.32	.....	.....	.....	.....	5,601.78
1901	65,000.00	.....	300,000.00	.....	2,998.80	18,348.61	.....	3,714.37	.....	11,652.24	.....	.....	.....	.....	462.20
1902	85,000.00	\$ 5,959.97	250,000.00	.....	4,256.50	5,908.69	.....	2,737.57	.....	20,983.07	.....	.....	.....	.....	224.73
1903	104,965.00	46,453.68	280,000.00	.....	.....	5,912.95	1,038.20	.....	.....	20,361.62	.....	.....	.....	.....	456.03
1904	104,965.00	46,439.72	315,000.00	.....	.....	5,421.90	1,013.87	1,894.37	.....	14,299.61	.....	.....	.....	.....	887.16
1905	134,965.00	44,968.50	275,000.00	.....	.....	6,849.00	144.00	.....	.....	20,643.40	.....	.....	.....	.....	418.10
1906	144,965.00	44,987.71	250,000.00	.....	.....	8,132.35	778.48	.....	.....	14,907.36	.....	.....	.....	.....	319.16
1907	141,558.75	44,183.87	100,000.00	.....	.....	8,248.65	370.72	.....	.....	10,606.03	.....	.....	\$ 892.71	.....	644.05
1908	154,627.00	44,157.27	65,000.00	.....	.....	9,446.40	232.27	.....	.....	4,231.61	.....	.....	735.77	.....	1,313.87
1909	162,325.00	45,971.44	10,000.00	.....	.....	9,992.75	2,860.92	.....	.....	9,734.43	.....	.....	7,340.82	.....	609.56
1910	167,632.00	45,974.86	89,500.00	.....	.....	9,909.90	5,918.35	.....	.....	4,339.25	\$ 973.90	.....	2,036.39	.....	1,021.87
1911	174,632.00	47,560.21	155,000.00	.....	.....	11,611.15	1,155.00	.....	.....	6,659.89	1,191.80	.....	1,615.38	.....	1,221.26
1912	182,365.00	46,597.08	.....	.....	.....	11,838.40	40.00	.....	.....	22,750.18	1,350.03	.....	556.94	.....	1,031.55
1913	191,925.00	47,335.62	29,100.00	.....	.....	12,404.25	218.45	.....	.....	10,665.57	1,850.25	.....	486.00	.....	732.97
1914	200,000.00	46,995.53	.....	.....	\$ 9,237.81	3,831.15	2,175.13	.....	.....	22,590.44	1,792.99	.....	338.73	\$ 3,333.33	3,541.15
1915	200,000.00	46,991.66	21,425.00	.....	9,175.86	.....	887.88	.....	.....	13,629.41	1,466.64	1,024.91	8,000.00	4,181.24	31,398.08
1916	197,074.35	46,996.43	.....	.....	9,599.81	.....	425.30	.....	.....	13,511.12	2,193.57	1,031.47	8,000.00	1,555.12	38,339.99
1917	199,560.00	46,903.61	3,488.31	7,118.90	1,450.05	11,537.79	10,175.70	1,637.15	18.12	8,000.00	2,869.20	44,262.48
1918	207,586.00	48,630.71	2,642.70	48.12	1,580.00	\$ 93.61	8,425.92	960.19	18.61	8,000.00	3,559.85	34,125.49
1919	190,000.00	45,000.00	4,917.84	\$ 3,450.00	19,924.00	407.07	13,345.59	1,028.05	88.27	8,000.00	1,442.07	45,599.71
1920	250,098.27	53,971.48	15,000.00	17,438.28	.....	5,007.00	4,095.03	5,141.92	.....	32,761.08	1,654.02	263.86	8,000.00	2,517.64	51,018.20
1921	276,951.01	65,203.12	86,000.00	25,463.77	.....	88,734.92	53,635.02	6,068.17	976.47	27,442.59	2,165.05	2,661.67	8,000.00	4,698.24	55,684.15
1922	264,618.05	63,341.26	25,000.00	17,060.00	.....	50,888.65	16,153.03	10,074.88	3,326.28	43,047.41	3,057.91	7,191.93	8,000.00	1,765.78	58,797.69
1923	262,724.50	57,166.63	.....	18,388.20	.....	5,000.00	.....	19,019.09	3,319.44	24,456.20	1,432.89	1,550.69	8,000.00	3,391.96	58,404.21

Add premium on Bonds, less
Balances reverting to the City 35,559.89

Expended in connection with preparation and publication of "A Monograph of the Pheasants" — gift of Col. Anthony R. Kuser
Expended in connection with Galapagos Expedition — gift of Harrison Williams

194,100.00
98,670.00

Totals..	\$4,133,536.93	\$1,031,790.36	\$2,426,584.89	\$117,412.58	\$120,443.93	\$407,002.69	\$77,333.08	\$96,232.26	\$8,122.87	\$393,544.76	\$22,754.44	\$27,852.27	\$75,333.33	\$39,055.65	\$995,602.12
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\$7,591,912.18

\$237,856.51

\$2,142,833.47

CLASSIFIED SUMMARY OF EXPENDITURES FOR THE YEAR 1923, NEW YORK ZOOLOGICAL SOCIETY

	PARK MAINTENANCE		AQUARIUM MAINTENANCE		NEW YORK ZOOLOGICAL SOCIETY FUNDS						GRAND TOTAL	
	From City Funds		From City Funds		Special Funds		General Income Fund		Scientific & Research			
	Salaries	Other Items	Salaries	Other Items	Salaries	Other Items	Salaries	Other Items	Salaries	Other Items	Salaries	Other Items
Zoological Park: Maintenance by the City												
Administration.....	\$27,393.77	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$27,393.77	.....
Care of Buildings and Collections.....	87,862.09	.....	.....	.....	.....	.....	.....	.....	.....	.....	87,862.09	.....
Care of Grounds.....	79,785.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	79,785.01	.....
Supplies.....	\$51,208.17	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$51,208.17	.....
Equipment.....	7,174.82	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,174.82	.....
Materials.....	2,468.39	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,468.39	.....
Miscellaneous and Contingencies.....	4,427.30	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,427.30	.....
Construction of Machinery Shed.....	8,741.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,741.70	.....
Construction and Repair (Gate Receipts).....	.....	.....	.....	.....	\$11,646.98	\$ 6,741.22	.....	.....	.....	.....	11,646.98	6,741.22
Contributions by the Society												
Maintenance.....	.....	.....	.....	.....	.....	.....	\$18,338.65	\$ 3,999.88	.....	.....	18,338.65	3,999.88
Administration.....	.....	.....	.....	.....	.....	.....	12,277.04	14,820.97	.....	.....	12,277.04	14,820.97
Purchase of Animals.....	.....	.....	.....	.....	.....	24,456.20	.....	.....	.....	.....	.....	24,456.20
Scientific Purposes.....	.....	.....	.....	.....	.....	.....	.....	2,286.25	\$12,437.30	\$ 9,302.65	12,437.30	11,588.90
Heads and Horns Collection.....	.....	.....	.....	.....	.....	.....	.....	487.50	1,063.19	487.50	1,063.19	.....
Insurance.....	.....	.....	.....	.....	.....	.....	.....	3,039.21	.....	.....	.....	3,039.21
Membership Expenses.....	.....	.....	.....	.....	.....	.....	.....	1,891.14	.....	.....	.....	1,891.14
Pension Contributions.....	.....	.....	.....	.....	.....	4,335.00	.....	3,665.00	.....	.....	.....	8,000.00
Paintings.....	.....	.....	.....	.....	.....	2,400.02	.....	5,000.00	3,109.59	.....	.....	2,400.02
Miscellaneous Expenditures.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,000.00	3,109.59
Aquarium: Maintenance by the City												
Construction of additional Story.....	.....	.....	\$46,429.44	\$10,737.19	.....	.....	.....	.....	.....	.....	46,429.44	10,737.19
.....	.....	.....	.....	75,082.00	.....	.....	.....	.....	.....	.....	.....	75,082.00
Contributions by the Society												
Aquarium Specimens.....	.....	.....	.....	.....	.....	.....	1,432.89	.....	.....	.....	.....	1,432.89
Totals.....	\$195,040.87	\$74,020.38	\$46,429.44	85,819.19	\$11,646.98	\$37,932.44	\$35,615.69	\$34,244.93	\$12,924.80	\$10,365.84	\$301,657.78	\$242,382.78
Totals by Funds.....	\$269,061.25	.....	\$132,248.63	.....	\$49,579.42	.....	\$69,860.62	.....	\$23,290.64	.....	\$544,040.56	.....

Treasurer's Reports

FOR THE YEAR ENDING DECEMBER 31, 1923

CORNELIUS R. AGNEW, *Treasurer*
22 William Street
New York City

GROUP I

Maintenance Fund

ZOOLOGICAL PARK ACCOUNT

INCOME

Received from the City of New York on account of Park Maintenance Appropriation of \$264,515.00 for the year.....	\$259,954.93
Due from the City on Account of Park Maintenance Appropriation	2,769.57
Unexpended balances reverting to the City.....	1,790.50
	<hr/>
Deficit payable by the New York Zoological Society Shortage in City Maintenance Appropriation for 1923	9,470.68
	<hr/>
	\$273,985.68

EXPENDITURES

Personal Service:

General administration	\$28,514.57
Maintenance of buildings and care of collections	88,456.94
Maintenance and care of grounds.....	79,845.41

Supplies:

Food for animals.....	\$29,999.64
Fuel	18,062.66
Fuel oil	51.26
Office supplies	508.63
Stationery and printing.....	829.90
Drugs and medicines.....	112.69
Medical and surgical supplies.....	62.10
Disinfectants	211.07
Janitors' supplies	216.85
Motor vehicle supplies.....	599.86
Ice	121.80
Lubricating oil	7.35
Nursery stock and seeds.....	133.12
Nursery supplies	3.50
Miscellaneous supplies	1,203.91
	<hr/>
	52,124.34

Equipment:

Uniforms and wearing apparel.....	\$2,639.60
Office equipment	87.87
Motor vehicles and equipment.....	1,034.06
Awnings and shades.....	6.00
Janitors' equipment	580.56
Mats and floor coverings.....	54.00
Painters' equipment	154.46
Rubber hose	163.52
Tools and machinery.....	262.59
Miscellaneous equipment	720.49
	5,703.15

Materials:

Motor vehicle materials.....	\$185.70
Bolts, nails and hardware.....	390.93
Electrical materials	79.08
Fencing and netting.....	812.52
Glaziers' materials	520.70
Lumber	2,135.62
Paints and oils	1,890.21
Plumbing materials	2,532.79
Sand, cement and brick.....	509.55
Steel and iron.....	267.78
Miscellaneous materials	665.69
	9,990.57

Contract or Open Order Service:

Apparatus and machinery repairs.....	\$142.94
Plumbing repairs	1,795.44
Painting labels	198.00
Sanitary service	130.00
Miscellaneous repairs	187.22
Motor vehicle repairs.....	89.98
Electric service	3,497.35
Gas service	86.92
Telephone service	1,028.35
Expressage and deliveries.....	147.50
	7,303.70

Contingencies:

Medical attendance, animals	\$12.00
Medical attendance, employees.....	140.00
Miscellaneous expenses	104.50
	256.50
Total expenditures	\$272,195.18
Unexpended balances reverting to the City.....	1,790.50
	\$273,985.68

AQUARIUM ACCOUNT

INCOME

Received from the City of New York on account of Aquarium Maintenance Appropriation (\$59,226) for the year.....	\$54,761.04
Due from the City on Account of Aquarium Mainten- ance Appropriation	2,405.59
Unexpended balance reverting to the City.....	2,059.37
Deficit payable by the New York Zoological Society Shortage in City Maintenance Appropriation for 1923	350.00
	<hr/>
	\$59,576.00

EXPENDITURES

Salaries and wages.....	\$46,429.44
Forage and veterinary supplies.....	2,581.55
Fuel supplies	5,186.25
Office supplies	90.00
Laundry, cleaning and disinfecting supplies.....	109.63
Refrigerating supplies	137.06
General plant supplies.....	389.45
Office equipment	13.75
Wearing apparel	170.00
General plant equipment.....	760.91
General plant materials	399.61
Repairs and replacements.....	763.41
Expressage and cartage.....	220.53
Telephone service	175.04
Contingencies	90.00
	<hr/>
Total expenditures	\$57,516.63
Unexpended balance reverting to the City.....	2,059.37
	<hr/>
	\$59,576.00

M. C. FENSTEMAKER, *Clerk.*

GROUP II

Endowment Fund

GENERAL ENDOWMENT ACCOUNT

Funds as of December 31, 1922:

Cash in bank.....	\$3,707.92
Investments at cost.....	477,445.15

RECEIPTS

Estate of Watson B. Dickerman.....	\$20,000.00
Estate of Charles E. Rhinelander.....	5,000.00
Louis J. Boury.....	800.00
John J. Pierpont.....	250.00
Other subscriptions	428.08

Life memberships	\$2,650.00
Profit on redemption of bonds.....	62.75

EXPENDITURES

No expenditures during 1923

Funds as of December 31, 1923:

Investments at cost (for details see list of securities)	\$506,909.40
Uninvested balance	3,434.50

\$510,343.90
\$510,343.90

SAGE ENDOWMENT ACCOUNT

Funds as of December 31, 1922:

Cash in bank.....	\$6,481.05
Investments at acquired values.....	549,672.20

RECEIPTS

Estate of Margaret Olivia Sage.....	50,000.00
-------------------------------------	-----------

\$606,153.25

EXPENDITURES

No expenditures during 1923

Funds as of December 31, 1923:

Investments at cost (for details see list of securities)	\$598,832.19
Uninvested balance	7,321.06

\$606,153.25

ROCKEFELLER ENDOWMENT ACCOUNT

RECEIPTS

John D. Rockefeller, Jr.....	\$500,000.00
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EXPENDITURES

No expenditures during 1923

Funds as of December 31, 1923:

Investments at cost (for details see list of securities)	\$499,337.50
Cash in bank	662.50
	<hr/>
	\$500,000.00

GEORGE F. BAKER ENDOWMENT ACCOUNT

Funds as of December 31, 1922:

Cash in bank.....	\$87.75
Investments at cost.....	99,912.25
	<hr/>
	\$100,000.00

Funds as of December 31, 1923:

Investments at cost (for details see list of securities)	\$99,912.25
Uninvested balance	87.75
	<hr/>
	\$100,000.00

GROUP III

Special Endowment Fund

CADWALADER ANIMAL ENDOWMENT ACCOUNT

Funds as of December 31, 1922:

Cash in bank.....	\$2,296.58
Investments at cost.....	20,000.00

RECEIPTS

Interest on investments.....	1,000.00
<hr/>	

EXPENDITURES

No expenditures during 1923

Funds as of December 31, 1923:

Investments at cost (for details see list of securities)	\$20,000.00
Uninvested balance	3,296.58
<hr/>	

\$23,296.58

\$23,296.58

FLORENCE LYDIG STURGIS ACCOUNT

RECEIPTS

Estate of Florence Lydig Sturgis.....	\$10,000.00
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EXPENDITURES

No expenditures during 1923

Uninvested balance as of December 31, 1923.....	\$10,000.00
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STOKES BIRD ENDOWMENT ACCOUNT

Funds as of December 31, 1922:

Cash in bank.....	\$758.54
Investments at cost.....	5,056.46
<hr/>	

RECEIPTS

Interest on investments.....	200.00
<hr/>	

\$6,015.00

EXPENDITURES

Preservation of bird life.....	\$250.00
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Funds as of December 31, 1923:

Investments at cost (for details see list of securities)	\$5,056.46
Uninvested balance	708.54
<hr/>	

5,765.00

\$6,015.00

CARNEGIE PENSION ENDOWMENT ACCOUNT

Funds as of December 31, 1922:

Investments at cost.....	\$100,066.25
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Funds as of December 31, 1923:

Investments at cost (for details see list of securities)	\$100,066.25
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GROUP IV

Special Fund
ANIMAL ACCOUNT

Unexpended balance as of December 31, 1922:

Cash in bank.....	\$16,856.83
Cash on hand.....	100.00
	<hr/>

RECEIPTS

Receipts from park:

Privilege Department (1923 receipts).....	\$18,000.00
Sale of animals.....	3,648.90
Checking	17.00
Miscellaneous receipts	211.90
	<hr/>
	\$38,834.63

EXPENDITURES

Purchase of animals:

Mammals	\$14,284.84
Birds	4,895.38
Reptiles	2,581.90
Insects	22.50
	<hr/>
	\$21,784.62

Express and other charges.....

Traveling and other expenses.....	\$2,213.47
	458.11
	<hr/>

Unexpended balance as of December 31, 1923:

Cash on hand.....	\$100.00
Cash in bank.....	14,278.43
	<hr/>
	\$38,834.63

ART GALLERY ACCOUNT

Unexpended balance as of December 31, 1922..... \$2,388.69

RECEIPTS

General Income Fund (transfer).....	50.00
	<hr/>
	\$2,438.69

EXPENDITURES

Oil paintings	\$2,200.00
Miscellaneous expenses	200.02
	<hr/>

Unexpended balance as of December 31, 1923.....

38.67

\$2,438.69

IMPROVEMENT AND REPAIR ACCOUNT

Unexpended balance as of December 31, 1922.....	\$1,461.96
RECEIPTS	
Gate receipts	\$17,290.30
General Income Fund (transfer).....	5,000.00
	<hr/>
	\$22,290.30
EXPENDITURES	
Boiler repairs	\$5,572.96
Electrical repairs	400.00
Elephant Fence repairs	1,566.90
Elephant House Roof and Skylight repairs.....	8.80
Fence repairs	1,979.31
Guard Rails	500.00
Painting Fences, etc.....	1,121.61
Primate Cage repairs.....	1,050.00
Sea Lion Pool repairs.....	1,338.83
Walk repairs	2,636.24
Water Supply repairs.....	155.22
Miscellaneous repairs	7,058.33
	<hr/>
Unexpended balance as of December 31, 1923.....	\$23,388.20
	<hr/>
	364.06
	<hr/>
	\$23,752.26

GROUP V

General Income Fund

Unexpended balance as of December 31, 1922.....	\$12,184.79
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RECEIPTS

Income from General Endowment.....	\$23,075.69
Income from Sage Endowment.....	32,461.23
Income from Rockefeller Endowment.....	4,369.43
Income from Baker Endowment.....	5,000.00
Interest on bank balances.....	1,045.62
	<hr/>
Annual Dues	\$21,030.00
Sustaining Memberships	160.00
	<hr/>
Harrison Williams for Galapagos Expedition.....	\$2,286.25
American Museum of Natural History.....	400.00
Junior Auxiliary	75.00
	<hr/>
	\$102,088.01

EXPENDITURES

General office expenses.....	\$5,510.29
Stationery, printing and office supplies.....	3,072.54
Salary of Secretary.....	7,000.00
Treasurer's office expenses.....	1,600.00
Audit of accounts.....	1,000.00
Legal expenses	2,500.00
Annual and separate reports.....	6,415.18
	<hr/>
Annual Meeting expenses.....	\$1,023.64
Reception expenses	867.50
	<hr/>
Art Gallery Account (transfer).....	\$50.00
Improvement and Repair Account (transfer).....	5,000.00
Publication Account (transfer).....	12,000.00
Tropical Research Account (transfer).....	250.00
Library Account (transfer).....	1,000.00
Heads and Horns Collection Account (transfer).....	600.00
	<hr/>
Zoological Park Account (transfer).....	3,999.88
Special Maintenance (Zoological Park).....	15,019.21
Special Maintenance (Aquarium).....	3,319.44
Aid to Employes.....	273.00
Pension Fund Income Account (transfer).....	3,665.00
Aquarium specimens	1,432.89
Aquarium expenses	638.64
Insurance (Aquarium)	621.65
Insurance (Zoological Park).....	2,417.56
Galapagos Expedition	2,286.25
Miscellaneous expenses	2,197.95
	<hr/>
Unexpended balance as of December 31, 1923.....	18,327.39
	<hr/>
	\$102,088.01

GROUP VI

Scientific and Research Fund

PUBLICATION ACCOUNT

Unexpended balance as of December 31, 1922.....	\$314.30
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RECEIPTS

General Income Fund (transfer).....	\$12,000.00
Sale of "Our Vanishing Wild Life".....	6.25
Sale of "Tropical Wild Life in British Guiana".....	67.27
	<hr/>
	\$12,073.52
	<hr/>
	\$12,387.82

EXPENDITURES

Bulletin	\$5,835.79
Zoologica	2,528.64
Photographs and slides.....	2,369.49
Express and other charges.....	8.24
	<hr/>
Unexpended balance as of December 31, 1923.....	\$10,742.16
	<hr/>
	1,645.66
	<hr/>
	\$12,387.82

TROPICAL RESEARCH ACCOUNT

Unexpended balance as of December 31, 1922.....	\$5.85
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RECEIPTS

George F. Baker	\$1,000.00
John E. Berwind.....	1,000.00
Robert Brewster	1,000.00
T. Coleman du Pont.....	1,000.00
Edward S. Harkness.....	1,000.00
Anthony R. Kuser.....	1,000.00
Ogden Mills	1,000.00
George D. Pratt.....	1,000.00
Mortimer L. Schiff.....	1,000.00
Dr. Lewis R. Morris.....	500.00
Cleveland H. Dodge.....	250.00
General Income Fund (transfer).....	250.00
	<hr/>
	\$10,000.00
	<hr/>
	\$10,005.85

EXPENDITURES

Salaries	\$7,998.21
Laboratory supplies	708.95
Laboratory expenses	635.04
Stationery and office supplies.....	250.98
Traveling and other expenses.....	68.60
Miscellaneous supplies	91.20
Miscellaneous expenses	252.87
	<hr/>
	\$10,005.85
	<hr/>
	\$10,005.85

LIBRARY ACCOUNT

Unexpended balance as of December 31, 1922.....	\$138.74
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RECEIPTS

General Income Fund (transfer).....	1,000.00
	<hr/>
	\$1,138.74

EXPENDITURES

Books, pamphlets, etc.....	\$100.16
Subscriptions to periodicals.....	162.24
	<hr/>
Express and other charges.....	\$.71
Miscellaneous expenses	728.83
	<hr/>
Unexpended balance as of December 31, 1923.....	146.80
	<hr/>
	\$1,138.74

HEADS AND HORNS COLLECTION ACCOUNT

Unexpended balance as of December 31, 1922.....	\$981.36
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RECEIPTS

General Income Fund (transfer).....	600.00
	<hr/>
	\$1,581.36

EXPENDITURES

Heads and Horns.....	\$537.86
Express and other charges.....	37.33
Miscellaneous expenses	975.50
	<hr/>
Unexpended balance as of December 31, 1923.....	30.67
	<hr/>
	\$1,581.36

H. R. MITCHELL, *Chief Clerk*
January 1, 1924.

CORNELIUS R. AGNEW, *Treasurer*

NEW YORK ZOOLOGICAL PARK
Code N. D. P. 332 T.

Construction of Machinery Shed and a General Storage Shed, Including Architect's fees.

Approved by Board of Estimate, June 11, 1920.....	\$15,000.00
<i>Expenditures during 1923:</i>	
Payment No. 1—Dinney-Newgarden Co.....	\$8,471.70
Pay Roll, Engineering.....	270.00
	<u>\$8,741.70</u>
Unexpended balance as of December 31, 1923.....	6,258.30
	<u>\$15,000.00</u>

January 1, 1924.

JOHN H. BERGEN, *Chief Clerk,*
Department of Parks, Bronx.

AQUARIUM

FUNDS AVAILABLE YEAR—1923

Approved by Board of Estimate—Dec. 28, 1921.

Code CDP—4-A. Construction of an additional story to the Aquarium Building, Battery Park (40-year serial).	\$75,000.00
Code CDP—4-B. Plumbing, heating and Interior Equipment for additional story to Aquarium Building, Battery Park (15-year serial).....	11,000.00 \$86,000.00

ENCUMBERANCES AGAINST CDP—4-A AND 4-B

Original contract awarded to Thos. A. Reilly Co., Aug. 29, 1923, for the construction of additional story to Aquarium, chargeable to the fund CDP—4-A.	\$62,000.00
Additional contracts awarded to Thos. A. Reilly Co., for the construction of additional story to Aquarium, chargeable to the fund CDP—4-A.....	11,525.00
Open Market Order for Blueprints—Electro Sun Co. chargeable to the fund CDP—4-A.....	7.00
Contract awarded to John Smith for plumbing, heating, etc., chargeable to CDP—4-B.....	700.00
Open Market Order for electrical work in connection with Thos. A. Reilly's contract, chargeable to CDP—4-B.	850.00 \$75,082.00
Balance available	10,918.00
Amount available for the Interior finishing.....	\$86,000.00
Amount available for the construction of additional story.....	\$9,450.00 1,468.00
	\$10,918.00

January 1, 1924.

JAMES A. SHERRY, *Bookkeeper,*
Department of Parks, Manhattan.

SECURITIES OWNED BY THE NEW YORK ZOOLOGICAL SOCIETY

December 31, 1923

LISTED AT COST OR BEQUEST VALUE

Endowment Fund

GENERAL ENDOWMENT ACCOUNT

Bonds as follows:

\$50,000	American Telephone & Telegraph Co., Collateral Trust 4%, 1929	\$45,000.00
30,000	Amer. Tel. & Tel. Co. 20-yr. Skg. Fd. Debenture 5½%, 1943	29,475.00
4,000	Baltimore & Ohio RR. Co., 1st Mtge. 4%, 1948.....	3,120.00
3,000	Central RR. Co. of New Jersey, Gen. Mtge. 5%, 1987....	3,031.25
22,000	Chic. Mil. & Pudget Sd. Ry. Co., 1st Mtge. Series A, 4%, 1949	20,775.00
20,000	Chicago & North-Western Ry. Co., Gen. Mtge. 4%, 1987	19,750.00
5,000	Colorado & Southern Ry. Co., Gen. Mtge. 4%, 1929....	4,750.00
9,000	Lehigh Valley Terminal Ry. Co., 1st Mtge. 5%, 1941..	9,090.00
75,000	P. Lorillard Co., 5%, 1951.....	72,775.00
5,000	Mich. Central RR. Co., Mich. Air Line RR. 1st Mtge. 4%, 1940	4,950.00
20,000	Milwaukee Sparta & North-Western Ry. Co., 1st Mtge. 4%, 1947	18,900.00
5,000	Missouri & Illinois Bridge & Belt RR. Co., 1st Mtge. 4%, 1951	5,000.00
1,000	Morris & Essex RR. Co., 1st Rfdg. Mtge. 3½%, 2000...	876.25
25,000	New York & Westchester Ltg. Co., Gen. Mtge. 100-yr. 4%, 2004	19,750.00
25,000	Oregon Short Line RR. Co., 1st Cons. Mtge. 5%, 1946..	25,990.00
10,000	St. Paul, Minneapolis & Manitoba Ry. Co., Cons. Mtge. 4%, 1933	9,800.00
47,000	Union Pacific RR. Co., 1st Mtge. RR. & Land Grant 4%, 1947	44,058.00
12,500	United Electric Rys. Co., Gen. & Rfdg. Mtge. Series B, 4%, 1951	10,625.00
10,000	United Electric Rys. Co., Prior Lien, Series B, 4%, 1946	8,500.00
7,000	United New Jersey RR. & Canal Co., Gen. Mtge. 4%, 1944	6,230.00
50,000	United States Steel Corp., 10/60 yr. Skg. Fund 5%, 1963	51,851.75
20,000	Vandalia RR. Co., Cons. Mtge. Series B, 4%, 1957.....	19,400.00

Stocks as follows:

shares		
100	New York, Laekawanna & Western Ry. Co. Capital.....	9,615.00
546	Standard Oil Co. of New Jersey Preferred.....	61,472.15
25	United Electric Rys. Co. Capital.....	2,125.00

\$506,909.40

SAGE ENDOWMENT ACCOUNT

Bonds as follows:

\$6,000	Baltimore & Ohio RR. Co., Prior Lien, 3½%, 1925.....	\$4,860.00
4,000	Baltimore & Ohio RR. Co., Southwestern Div., Gold 3½%, 1925	3,490.00
7,000	Central New England Ry. Co., 1st Mtge. 50-yr. 4%, 1961.....	3,675.00
50,000	Central Pacific Ry. Co., 1st Rfdg. 4%, 1949.....	43,983.75
50,000	Chicago, Burlington & Quincy RR. Co., 1st & Rfdg. Series A, 5%, 1971	50,130.00
4,000	Chicago, Rock Island & Pacific Ry. Co., 1st & Rfdg. Gold 4%, 1934	3,070.00
6,000	Erie RR. Co., Prior Lien 4%, 1996.....	3,015.00
100,000	Indiana Steel Co., 1st Mtge. 5%, 1952.....	99,973.50
21,000	Interborough Rapid Transit Co., 1st & Rfdg. 5%, 1966.....	13,413.75
50,000	Liggett & Myers Tobacco Co., Gold 5%, 1951.....	49,262.50
10,000	New Brunswick Southern Ry. Co., 1st Mtge. 30-yr. Gold 3%, 1933	8,100.00
10,000	New York Central RR. Co., Cons. Mtge. Series A, 4%, 1998	8,034.00
50,000	New York Central RR. Co., Refdg. & Imp. Series C, 5%, 2013	47,250.00
4,000	N. Y. State Rys., 1st Cons. Mtge. Gold, Series A, 50-yr. 4½%, 1962	2,645.00
50,000	New York Telephone Co., 1st & Gen. Mtge. Skg. Fund 4½%, 1939	43,326.50
50,000	Northwestern Bell Telephone Co., Series A, 7%, 1941.....	53,441.25
10,000	Oregon-Wash. RR. & Nav. Co., 1st & Rfdg. Mtge. Series A, 4%, 1961	6,500.00
5,000	Rochester Ry. & Light Co., Cons. Mtge. 5%, 1954.....	4,475.00
3,000	St. Louis & Southwestern Ry. Co., 1st Cons. Gold 4%, 1932	2,130.00
6,000	Schenectady Ry. Co., 1st Mtge. 30-yr. Series A, Gold 5%, 1946	3,690.00
7,000	Washington Terminal Co., 1st Mtge. 3½%, 1945.....	4,830.00

Stocks as follows:

shares		
200	Atchison Topeka & Santa Fe Ry. Co., Preferred.....	14,525.00
52	Bankers Trust Co., Capital.....	19,500.00
51	Chicago & Northwestern Ry. Co., Common.....	3,190.69
51	Illinois Central RR. Co., Capital.....	5,022.46
144	Pennsylvania RR. Co., Capital Par \$50.....	4,887.00
88	Pullman Co., Capital.....	9,636.00
454	Standard Oil Co. of New Jersey, Preferred.....	45,701.91
100	Union Pacific RR. Co., Preferred.....	6,237.50
250	United States Steel Corp., Preferred.....	27,359.38
38	Western Union Telegraph Co., Capital.....	3,477.00

\$598,832.19

ROCKEFELLER ENDOWMENT ACCOUNT

Bonds as follows:

\$50,000	Central Pacific Ry. Co., 1st Rfdg. Mtge. 4%, 1949.....	\$43,050.00
50,000	Chic. Bur. & Quiney RR. Co., 1st & Rfdg. Mtge. Series A, 5%, 1971	49,322.50
50,000	Lake Shore & Michigan Southern RR. Co., 4%, 1931.....	45,915.50
50,000	Liggett & Myers Tobacco Co., Gold 5%, 1951.....	48,243.75
25,000	P. Lorillard Co., Gold 5%, 1951.....	24,037.50
50,000	New England Tel. & Tel. Co., 1st Mtge. Series A, 5%, 1952	48,735.00
40,000	New York Central RR. Co., Cons. Mtge. Series A, 4%, 1998	32,015.00
50,000	New York Central RR. Co., Rfdg. & Imp. Series C, 5%, 2013	47,562.50
50,000	New York Telephone Co., 1st & Gen. Mtge. Skg. Fd. 4½%, 1939	46,787.50
50,000	Union Pacific RR. Co., 1st RR. & Land Grant 4%, 1947...	45,693.75
50,000	United States Steel Corp., 10/60 yr. Skg. Fd. 5%, 1963...	51,075.00
18,000	Western Union Telegraph Co., Fdg. & Real Estate 4½%, 1950	16,899.50
		<hr/>
		\$499,337.50

GEORGE F. BAKER ENDOWMENT ACCOUNT

Bonds as follows:

\$50,000	National Tube Co., 1st Mtge. 5%, 1952.....	\$49,899.75
50,000	Pennsylvania RR. Co., Gen. Mtge. Series B, 5%, 1968...	50,012.50
		<hr/>
		\$99,912.25

Special Endowment Fund

CADWALADER ANIMAL ENDOWMENT ACCOUNT

\$20,000	Illinois Central RR. & Chicago St. Louis & New Orleans RR. Co. Jt., 1st Rfdg. Mtge. Series A, 5% Bonds, 1963	\$20,000.00
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STOKES BIRD ENDOWMENT ACCOUNT

\$5,000	Illinois Central RR. Co., Rfdg. Mtge. 4% Bonds, 1955...	\$5,056.46
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CARNEGIE PENSION ENDOWMENT ACCOUNT

Bonds as follows:

\$25,000	Chicago & Northwestern Ry. Co., Gen. Mtge. 4%, 1987...	\$23,687.50
25,000	Illinois Central RR. Co., Rfdg. Mtge. 4%, 1955.....	23,062.50
25,000	Lehigh Coal & Nav. Co., Cons. Mtge. Skg. Fd. Series A, 4½%, 1954	24,875.00
1,000	Michigan Central RR. Co., Gold 3½%, 1952.....	817.50
5,000	Morris & Essex RR. Co., 1st Rfdg. Mtge. 3½%, 2000....	4,373.75
25,000	Philadelphia & Baltimore Central RR. Co., 1st Mtge. 4%, 1951	23,250.00
		<hr/>
		\$100,066.25

Pension Fund Income Account

Uninvested balance as of December 31, 1922:

Deposited with The Farmers Loan & Trust Co....	\$3,366.92	
Deposited with Corn Exchange Bank (Bronx)....	67.90	\$3,434.82
 Investments at cost.....		
		<u>86,794.75</u>

RECEIPTS

Interest on Bank Balances.....	\$149.62	
Interest on Bond Investments.....	4,039.58	
Dues collected from Zoological Society employees.....	4,216.52	
Contributed by the New York Zoological Society:		
Interest on Carnegie Endowment investments.....	\$4,335.00	
General Income Fund (transfer).....	3,665.00	8,000.00
		<u>\$106,635.29</u>

EXPENDITURES

Physical examinations	\$65.00	
Refund of dues with accrued interest to resigning members	904.46	
Pension payments	4,611.69	
Clerical services and printing.....	342.00	
Death benefit a/c Thomas Dwyer.....	87.86	\$6,011.01

Funds as of December 31, 1923:

Investments at cost:

\$5,000 M.S.S.M. & Atlantic Ry., first 1926 4% Bonds	\$4,868.75	
5,000 Twenty-third St. Ry. Co. Imp. & Ref. 1962 5% Bonds	4,825.00	
6,000 B. & O. RR. Co., first 1948 4% Bonds.....	4,680.00	
7,000 Chic. Milwaukee & St. Paul Ry. Co., 1932 4½% Bonds	5,368.75	
3,000 Union Pacific RR., first 1947 4% Bonds.....	2,486.25	
2,000 N. Y. Cent. RR. (Lake Shore Col.) 1998 3½% Bonds	1,300.00	
5,000 Oregon Short Line RR., 1946 5% Bonds.....	4,945.00	
6,000 Buffalo General Elec., first 1939 5% Ref. Bonds	5,640.00	
10,000 I. C. and St. L. & N. O. RR., Joint 1963 5% Bonds	9,818.75	
12,000 C. B. & Q. RR., Ill. Divn., 1949 3½% Bonds	9,462.00	
13,000 B. & O. (P. L. E. & W. Va.) RR., 1941 4% Ref. Bonds	10,506.25	
19,000 Mich. Central RR., first 1952 3½% Bonds....	15,416.00	
20,000 Liggett & Myers Tobacco Co., 1951 5% Bonds	19,600.00	98,916.75

Uninvested balance:

Deposited with The Farmers Loan & Trust Co....	\$1,592.12	
Deposited with Corn Exchange Bank (Bronx)....	115.41	1,707.53
		<u>\$106,635.29</u>

H. R. MITCHELL,

Asst. to Treasurer in Charge of Pensions.

January 1, 1924.

CORNELIUS R. AGNEW,
Treasurer.

MARWICK, MITCHELL & CO.
ACCOUNTANTS AND AUDITORS
40 EXCHANGE PLACE
NEW YORK

Auditors' Certificate

We have audited the books and accounts of the New York Zoological Society and of the "Carnegie Pension Fund Income Account" for the year ended December 31, 1923, and certify that the foregoing schedules are in accordance with the books, and that, in our opinion, they correctly record the transactions relating to the funds of the Society and the "Carnegie Pension Fund Income Account" for the year 1923, and the condition of the funds as at December 31, 1923.

The subscriptions, donations and dues reported as received and the income from investments have been properly accounted for, and the securities and cash on hand at December 31, 1923, as shown in the accounts of the Funds presented herewith, have been checked and found in order. Satisfactory vouchers have been produced for the expenditures.

40 Exchange Place, New York
April 30, 1924

MARWICK, MITCHELL & CO.
Chartered Accountants.

**Report of the Auditing Committee
OF THE
NEW YORK ZOOLOGICAL SOCIETY**

To the President and Board of Managers
of the New York Zoological Society:

Dear Sirs:

We beg to report that we have examined the annual audit of the books and accounts of the New York Zoological Society for the year ending December 31, 1923, made by Messrs. Marwick, Mitchell & Company, Chartered Accountants, and herewith submit the same to you as a complete and satisfactory audit of said books and accounts, including the General Funds, the Carnegie Pension Fund and the Pension Fund Income Account, it appearing that all expenditures and receipts of the various accounts are fully set forth therein; that the cash on hand and at the various depositories has been verified and found correct, and that all securities in which the funds of the Society are invested have been examined and found as reported.

Expenditures made through the Park Department of the City of New York have not been verified by this audit as such moneys have not passed through the hands of the Society, but are in due course checked and verified by the Comptroller of this City.

Respectfully submitted,

W. W. NILES, *Chairman.*
W. REDMOND CROSS

May 12, 1924.

SUBSCRIPTIONS TO THE ENDOWMENT FUNDS OF THE
NEW YORK ZOOLOGICAL SOCIETY

GENERAL ENDOWMENT ACCOUNT

E. C. Converse.....	\$50,000.00
Jacob H. Schiff.....	50,000.00
Maria DeWitt Jesup.....	25,000.00
George F. Baker.....	25,000.00
Cleveland H. Dodge.....	25,000.00
Samuel Thorne	25,000.00
Watson B. Dickerman.....	20,000.00
J. P. Morgan.....	20,000.00
Lispenard Stewart	12,500.00
Frank W. Kitching.....	10,329.16
Edward S. Harkness.....	10,000.00
James J. Hill.....	10,000.00
Henry Iden	10,000.00
Ogden Mills	10,000.00
Levi P. Morton.....	10,000.00
Percy R. Pyne.....	10,000.00
John D. Rockefeller, Jr.....	10,000.00
Edward Russ	10,000.00
Phoebe Anna Thorne	10,000.00
Charles E. Rhinelander.....	9,000.00
Mortimer L. Schiff.....	6,000.00
Abram G. Nesbitt	5,500.00
John D. Archbold.....	5,000.00
Samuel P. Avery.....	5,000.00
Frederick G. Bourne.....	5,000.00
Robert S. Brewster.....	5,000.00
John L. Cadwalader.....	5,000.00
Andrew Carnegie	5,000.00
Hugh J. Chisholm.....	5,000.00
George C. Clark.....	5,000.00
C. F. Dieterich.....	5,000.00
George J. Gould.....	5,000.00
M. Archer Huntington.....	5,000.00
George W. Perkins	5,000.00
Nelson Robinson	5,000.00
F. K. Sturgis.....	5,000.00
Henry A. C. Taylor.....	5,000.00
Mrs. Frederick F. Thompson.....	5,000.00
Emily Trevor	5,000.00
Serena Rhinelander	2,500.00
Grant B. Schley.....	2,500.00
Mrs. Finley J. Shepard.....	1,325.00
Dr. Walter B. James.....	1,000.00
Emma C. Jones.....	1,000.00
Jacob Langeloth	1,000.00
John A. Roebling.....	1,000.00
F. Augustus Schermerhorn.....	1,000.00
Louis J. Boury.....	800.00
C. N. Bliss.....	500.00
Dr. John F. Erdmann.....	500.00

John J. Pierpont.....	250.00
H. C. von Post.....	250.00
Through Ladies' Auxiliary.....	2,655.00
Life Memberships and Various Subscriptions.....	35,136.38
Profit on Sale of Bonds.....	598.36
	<hr/>
	\$510,343.90

SAGE ENDOWMENT ACCOUNT

Margaret Olivia Sage.....	\$686,318.87
Profit on Sale of Securities.....	26,848.75
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Transfers to Sage Construction Account.....	\$69,788.05
Transfers to Heads and Horns Building Account....	37,226.32
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Balance, December 31, 1923.....	\$606,153.25

ROCKEFELLER ENDOWMENT ACCOUNT

John D. Rockefeller, Jr.....	\$500,000.00
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GEORGE F. BAKER ENDOWMENT ACCOUNT

George F. Baker.....	\$100,000.00
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Special Endowment Fund

Andrew Carnegie (Pension).....	\$100,000.00
John L. Cadwalader (Animal).....	20,000.00
Florence Lydig Sturgis (Bird).....	10,000.00
Caroline Phelps Stokes (Bird).....	5,000.00
December 31, 1923.	

**CONTRIBUTIONS TO SPECIAL FUNDS OF THE NEW YORK
ZOOLOGICAL SOCIETY**

Includes all contributions of \$5,000 and over, and donations
to the original Park Improvement Fund of \$250,000.00

Andrew Carnegie	\$31,000.00
Jacob H. Schiff.....	22,300.00
George F. Baker.....	19,500.00
Samuel Thorne	18,950.00
George J. Gould.....	15,300.00
Mortimer L. Schiff.....	15,140.00
John D. Rockefeller.....	15,000.00
E. C. Converse.....	14,000.00
Cleveland H. Dodge.....	13,625.00
George D. Pratt.....	13,000.00
Percy R. Pyne.....	11,450.00
Edward S. Harkness.....	11,000.00
John D. Archbold.....	10,100.00
Mrs. Andrew Carnegie.....	10,000.00
Mrs. Frederick F. Thompson.....	10,000.00
Lispenard Stewart	9,250.00
William Rockefeller	9,000.00
Robert S. Brewster.....	8,500.00
Levi P. Morton	8,500.00
Anthony R. Kuser.....	8,200.00
Charles F. Dieterich.....	7,800.00
Charles T. Barney.....	7,500.00
F. Augustus Schermerhorn.....	7,500.00
Cornelius Vanderbilt	7,500.00
C. Ledyard Blair	6,750.00
A. Barton Hepburn.....	6,500.00
Mrs. Finley J. Shepard.....	6,400.00
John Cadwalader	6,200.00
Oliver H. Payne.....	6,000.00
Henry A. C. Taylor.....	6,000.00
William K. Vanderbilt.....	6,000.00
William C. Whitney.....	6,000.00
Nelson Robinson	5,900.00
John S. Barnes.....	5,750.00
Frederick G. Bourne.....	5,500.00
J. P. Morgan	5,500.00
Emerson McMillan	5,280.00
Oswald Ottendorfer	5,250.00
William D. Sloane.....	5,250.00
Edward J. Berwind.....	5,000.00
William E. Dodge.....	5,000.00
Robert Goelet	5,000.00
C. P. Huntington.....	5,000.00
Mrs. John B. Trevor.....	5,000.00
Mrs. Antoinette E. Wood.....	5,000.00

\$422,395.00

LIST OF ACCESSIONS BY THE
New York Zoological Society
AT THE ZOOLOGICAL PARK

1923

- ABRAHAM, DR. JOSEPH H., New York City:
Opossum.
- ALFORD, DR. A. E. B., Bainbridge, Ga.:
Red-Tailed Hawks (2 specimens).
- ANGEL, EDWARD, New York City:
American Crow.
- APPENGERLIER, PAUL, Bronxville, N. Y.:
English Red Squirrel.
- ARMITAGE, CAPTAIN G. W., New York City:
Tovi Parrakeet.
- ASHLUND, R. P., New York City:
Raceoon.
- AUCHINCLOSS, MRS. E. S., JR., Darien, Conn.:
Red-Shouldered Hawks (3 specimens).
- BAKER, MISS HETTIE GRAY, New York City:
Golden-Fronted Green Bulbul.
- BALCOM, DR. EMMA L., New York City:
Blue-Fronted Amazon, Yellow-Fronted Amazon.
- BARNETT, MRS. MAURICE, New York City:
Canaries (2 specimens).
- BARR, B. N., New York City:
South American Boa.
- BELL, NATHAN C., New York City:
Opossums (2 specimens).
- BENEDICT, CHARLES P., New York City:
Central American Boa.
- BENINCASA, G., New York City:
Opossum.
- BERGER, HARRY, New York City:
Screech Owl.
- BIRDSALL, MISS RUTH, Great Kills, S. I.:
Barbary Turtle Dove.
- BLAUWUW, F. E., Graveland, Holland:
Little White-Fronted Geese (2 specimens).
- BOVE, JOSEPH A., New York City:
Gannet.
- BOYCE, W. H., Bronxville, N. Y.:
Red-Shouldered Hawk.
- BRINER, JAMES M., Upper Montclair, N. J.:
Opossum.
- ROCK, C. L., Superintendent of Parks, Houston, Texas:
Texas Rattlesnake (partially albinistic).
- ROCKÖ, JOE, Brooklyn, N. Y.:
Galago Monkey.

- BRUNNER, ARTHUR, Mt. Vernon, N. Y.:
 Undulated Grass Parrakeet.
- BURROWS, H., S. S. Manchuria, New York City:
 Carrion Crow.
- BUTLER, MRS. L., New York City:
 Laughing Gull.
- BYRNES, CHRISTOPHER, Brooklyn, N. Y.:
 Box Tortoises (4 specimens).
- CADE, CECIL E., New York City:
 1 Chaffinch, 1 European Siskin, 1 Greenfinch. Total, 3 specimens.
- CAMP UNJEHELA, Chester, Conn., through JULIUS LAMM, New York City:
 19 Flat-Headed Adders, 7 Garter Snakes, 1 Water Snake. Total, 27 specimens.
- CARPENTER, PROFESSOR RHYS, Rosemont, Pa.:
 Woodchuck.
- CIRONE, THOMAS, Astoria, L. I.:
 Horned Grebe.
- CLARK, EMORY W., Canandaigua, N. Y.:
 1 Bronze Fruit Pigeon, 1 Formosan Teal, 4 Orange-Cheeked Waxbills, 1 Bleeding-Heart Pigeon, 1 Cockateel, 1 Dusky Trumpeter, 1 White-Backed Piping Crow, 1 Guiana Ibis, 1 Banded Parrakeet, 1 Sonnini Crested Screamers, 2 Cut-Throat Finches, 5 Common Waxbills, 2 Chaffinches, 1 Saffron Finch, 2 Grenadier Weavers, 2 Orange Weavers, 1 Napoleon Weaver, 2 Rufous-Necked Weavers, 4 Red-Billed Weavers, 5 Zebra Finches, 9 Strawberry Finches, 1 White Java Sparrow, 1 African Silver-Bill, 2 Bare-Eyed Cockatoos, 1 Red-and-Blue Macaw, 1 Blue-and-Yellow Macaw, 3 Blue-Crowned Conures, 2 Undulated Grass Parrakeets, 3 Barred Doves, 2 Scaly Doves, 1 Mexican Ground Dove, 2 Red-Winged Ground Doves, 1 Red Jungle Fowl, 1 Red-Tailed Chacalaca, 1 Laughing Gull, 4 Black-Bellied Tree Ducks, 1 Yellow-Faced Grassquit, 1 Roseate Spoonbill, 3 Canaries, 3 Giant Whydahs, 1 Red-Headed Finch, 2 Orange-Breasted Waxbills. Total, 89 specimens
- COHN, HERBERT, New York City:
 European Goldfinches (2 specimens).
- COHN, RAYMOND, New York City:
 European Siskins (2 specimens).
- CRAMER, C. WILLIAM, Morgantown, W. Va.:
 1 Banded Rattlesnake, 1 Bull Snake, 2 Copperhead Snakes, 1 Milk Snake. Total, 5 specimens.
- CRANE, JOSEPH, Noroton, Conn.:
 Coyote.
- CRIMMINS, M. L., Fort Bliss, Texas:
 1 Diamond Rattlesnake, 1 Coral King Snake, 2 Collared Lizards, 3 Alligator Lizards, 7 Horned Toads. Total, 15 specimens.
- CROCKER LABORATORY, COLUMBIA UNIVERSITY, New York City:
 3,745 White Rats, 1641 White Mice.
- CROSS, MRS. C. VANDERBILT, New York City:
 Blue-Fronted Amazon Parrot.
- CULLEN, J. W., Superintendent, Overton Park Zoo, Memphis, Tenn.:
 Cane-Brake Rattlesnakes (4 specimens).
- DALZELL, CHESTER, Great Barrington, Mass.:
 Timber Rattlesnakes (3 specimens).
- DAVIS, J. S., New York City:
 Canary.
- DAVIS, MRS. LEUNE, New York City:
 Gold Fish (12 specimens).
- DICKEY, DR. H. S., Newburgh, N. Y.:
 Salvin Razor-Billed Curassow.

- DILLON, CHARLES E., New York City:
 Screech Owl.
- DIXON, E. J., New York City:
 Woodchuck.
- DOELGER, CHARLES P., New York City:
 2 Silver Pheasants, 2 English Ring-Neck Pheasants.
- DOUGLAS, J. S., Douglas, Ariz.:
 Barn Owls (2 specimens).
- DRAGELIN, JOLL, New York City:
 White-Throated Sapajou Monkey.
- DUJAT, MRS. E., Weehawken, N. J.:
 Santo Domingo Amazon.
- DUNN, MISS MARGARET, New York City:
 Gray Seedeater.
- DURLEWANGER, MRS. CATHERINE, Brooklyn, N. Y.:
 7 Garter Snakes, 6 Ribbon Snakes, 3 Green Snakes, 2 Milk Snakes, 6 Ring-Necked Snakes, 1 Water Snake, 2 Black Snakes. Total, 27 specimens.
- ELEVSON, MRS. JANE, New York City:
 Green-Cheeked Amazon.
- ELLIOTT, C. W., JR., Passaic, N. J.:
 Tern.
- ESCHWIE, MRS. E., New York City:
 Tovi Parrakeet.
- EVEREST, ROBERT, New York City:
 Rhesus Monkeys (3 specimens).
- FAJAN, CHARLES L., Rahway, N. J.:
 1 Purple Gallinule, 1 Peruvian Ground Dove.
- FAJANS, EDWARD, New York City:
 Barn Owl.
- FISCHER, MRS. A. H., New Rochelle, N. Y.:
 White-Faced Sapajou.
- FISHER, A. D., New York City:
 2 Golden-Fronted Conures, 1 Greater Hill Myna, 26 Canaries. Total, 29 specimens.
- FLETCHER, JOHN R., Brooklyn, N. Y.:
 Tovi Parrakeet.
- FORRENS, T. H., New York City:
 Canary.
- FORRESTER, LEWIS E., Freeport, L. I.:
 1 Red-Crested Cardinal, 1 Cordon Bleu, 1 Orange-Cheeked Waxbill, 1 Black-Headed Mannikin. Total, 4 specimens.
- FRAADE, BERT and DAVID, New York City:
 Alligator.
- FULLMAN, E. W., Rossville, S. I.:
 White-Nosed Coati Mundi.
- FULLMAN, FRANK, Rossville, S. I.:
 Coati Mundi.
- GIFFORD, MRS. D. W., New York City:
 Alligator.
- GILLAM, ARTHUR L., Flushing, L. I.:
 24 Water Moccasons, 12 Diamond-Back Rattlesnakes, 6 Banded Rattlesnakes, 1 Pygmy Rattlesnake, 16 Water Snakes, 12 Striped Snakes, 15 Black Snakes, 4 Gopher Snakes, 3 Coachwhip Snakes, 1 Ribbon Snake, 2 Green Snakes, 1 King Snake, 1 Glass Snake, 6 Rattlesnakes, 2 Copperhead Snakes, 1 Pilot Black Snake, 1 Chicken Snake, 1 Corn Snake, 1 Milk Snake. Total, 110 specimens.

- GILLEN, CHARLES E., New York City:
 Domestic Rabbits (2 specimens).
- GLASIER, HENRY, New York City:
 Rhesus Monkey.
- GORDON, MRS. L., New York City:
 Canary.
- GRAHAM, H. R., Pongo, Bolivia, South America:
 South American Puma.
- GRANDLUN, MRS. CHARLES, New York City:
 Herring Gull.
- GRAYDON, J. ALPIN, New York City:
 Raccoon.
- GREENOUGH, MRS. ALFRED, White Plains, N. Y.:
 Tovi Parrakeets (2 specimens).
- GUBERNICK, I. EDWARD, New Britain, Conn.:
 Ocelot.
- GUTIERREZ, RUBI, New York City:
 Cotton-Headed Marmoset.
- HAMMOND, H. F., Searsdale, N. Y.:
 Opossum.
- HASSLER, WILLIAM G., New York City:
 Tovi Parrakeets (2 specimens).
- HICHTMYER, F. H., New York City:
 Alligator.
- HILD, JOSEPH, New York City:
 American Barn Owls (3 specimens).
- HINMAN, CAPTAIN SIDNEY, Coney Island, New York City:
 Gannet.
- HIRSCH, MISS R., New York City:
 Canary.
- HOCKMAN, MRS. WILLIAM, Red Bank, N. J.:
 Cowbird.
- HORNE, RICHARD and FIELD, JR., Mohegan Lake, N. Y.:
 Alligators (2 specimens).
- HUFF, MISS MARGARET, New York City:
 Red-Billed Hill-Tit.
- HUFF, MRS. S. W., New York City:
 Canaries (2 specimens).
- HUTTELEMAIER, G. W., New York City:
 Macaque Monkey.
- ILICH, MISS GLADYS, New York City:
 Lion Marmoset.
- JACOBER, MISS ELIZABETH, New York City:
 Wood Turtle.
- JAFFIE, MRS. ANNA, New York City:
 Green Monkey.
- JARVIS, CHARLES IRVING, Danbury, Conn.:
 Alligator.
- JEANNIN, VICTOR, West Sand Lake, N. Y.:
 Ring-Tailed Monkey.
- JOSEPH, ELLIS S., Sydney, Australia:
 1 Wallaroo, 2 Tasmanian Devils.
- KEENE MRS. A., New York City:
 Canary.
- KING, RICHARD R., New York City:
 Roseate Cockatoo.

- KING, W. J., Brooklyn, N. Y.:
 Ring-Tailed Lemur.
- KINSOLVING, DR. F., Hornersville, Mo.:
 Southern Milk Snake.
- KIRSTEN, MISS GERTRUDE, New York City:
 Green-Billed Toucans (2 specimens).
- KITCHELL, ROBERT D., Newark, N. J.:
 Alligator.
- KOERLIN, MRS. M., Yonkers, N. Y.:
 Woolly Monkey.
- KORELL, MRS., New York City:
 Hooded Sapajou Monkey.
- KUMMEL, MISS PEGGY, Richmond Hill, S. I.:
 Cotton-Headed Marmoset.
- KUSER, COLONEL ANTHONY R., Bernardsville, N. J.:
 Great Horned Owl.
- LAIRD, GEORGE A., New York City:
 1 Spider Monkey, 1 Mexican Tawney Robin.
- LAWLER, FRANK, MONTCLAIR, N. J.:
 Raceoon.
- LELY, PIET, COMPANY, Port-of-Spain, Trinidad:
 White-Nosed Coati Mundi.
- LOBELLE, MISS MARC, New York City:
 White-Faced Ring-Tailed Monkey.
- LORD, WILLIAM S., Glen Ridge, N. J.:
 12 Painted Turtles, 1 Spotted Turtle, 4 Musk Turtles, 2 Wood Tortoises,
 3 Garter Snakes, 1 Milk Snake. Total, 23 specimens.
- LORD, WILLIAM S. and GEORGE A., Glen Ridge, N. J.:
 25 Painted Turtles, 4 Spotted Turtles, 6 Mud Turtles. Total, 35 specimens
- MCGEEHAN, HON. JOHN E., New York City:
 Alligator.
- MCINTYRE, WILLIAM, New York City:
 Ruby-Throated Humming-Bird.
- MAHON, HAROLD M., New York City:
 Barred Owl.
- MANN, MISS CATHERINE GRACE, Englewood, N. J.:
 White-Faced Sapajou Monkey.
- MAYER, EUGENE, Long Beach, L. I.:
 25 Box Tortoises, 9 Spotted Turtles, 6 Mud Turtles, 550 Toads. Total, 590
 specimens.
- MEYER, MRS. CHARLES F., Katonah, N. Y.:
 Chinese Sky-Lark.
- MEYER, MRS. H., New York City:
 Alligator.
- MILLAR, DAVID, Forest Hills Gardens, L. I.:
 Great Horned Owls (2 specimens).
- MILLSPAUGH, MRS., New York City:
 Festive Amazon Parrott.
- MOESCHEN, L., New York City:
 1 Snapping Turtle, 1 Alligator.
- MOORE, JOSEPH C., Jersey City, N. J.:
 Coati Mundi.
- MOROSINI, MISS GUIILA P., New York City:
 Opossum.
- MORRIS, C. H., McConnelsville, Ohio:
 Barn Owl.

- MORRISON, C. K., New York City:
White-Faced Ring-Tailed Monkey.
- MOULTON, Mrs. A. J., New York City:
Venezuela Screech Owl.
- MURPHY, THOMAS J., New York City:
1 Spotted Turtle, 1 Milk Snake.
- NAEGLEN, JOSEPH, New York City:
Tree Snake.
- NEW YORK STATE CONSERVATION COMMISSION, Albany, N. Y.:
Raccoons (2 specimens).
- NOACK, H. R., Oakland, Calif.:
California Jays (2 specimens).
- OSBORN, HENRY FAIRFIELD, JR., New York City:
European Starlings (6 specimens).
- OSGOOD, J. C., New York City:
White-Faced Sapajou.
- PARDOF, DR. J. B., Bound Brook, N. J.:
4 Blacksnares, 2 Hog-Nosed Snakes.
- PEARCE, MISS ELIZABETH, Forest Hills, L. I.:
Alligator.
- PEMBER, KARL A., Woodstock, Vt.:
Duck Hawks (2 specimens).
- PORCARIS, P., Brooklyn, N. Y.:
Red-Shouldered Hawk.
- POVILITIS, PETER, Brooklyn, N. Y.:
Screech Owl.
- RENNIE, MRS. R., New York City:
South American Raccoon.
- REYNOLDS, H. L., New York City:
Ring-Tailed Monkey.
- RIGGS, CLARENCE B., New York City:
Long-Eared Owl.
- ROCCA, D., New York City:
Great Horned Owl.
- ROLAND, CHARLES, West Fort Lee, N. J.:
Cuban Amazon Parrot.
- RUDOLPH, MISS, New York City:
Squirrel Monkey.
- SCHELLKAS, WILLIAM, New York City:
Marmoset.
- SCHNITZER, WILLIAM, New York City:
Barred Owl.
- SCHORR, JOSEPH, New York City:
Red Howler Monkey.
- SCOTT, J. C., New York City:
Caimans (2 specimens).
- SESSIONS, J. B., Bristol, Conn.:
Gray Fox.
- SHACKELFORD, MRS. J. B., New York City:
Mongolian Hedgehog.
- SMITH, E. PERCY, New York City:
Cock-of-the-Rock.
- SMITH, MRS. ORMOND G., New York City:
Sulphur-Crested Cockatoo.

- SMITH, SHELDON, Ithaca, N. Y.:
Green Monkey.
- SMITH, WILBUR, South Norwalk, Conn.:
Pilot Black Snake.
- SNAKE KING, W. A., Brownsville, Texas:
Alligator Lizards (4 specimens).
- SORDELLINI, E., New York City:
Ring-Necked Pheasant.
- SPARROW, EDWARD G., New York City:
1 Yellow-Winged Sugar Bird, 1 Galapagos Turtle.
- SPECKMAN, ED. H., New York City:
Saw-Whet Owl.
- SPEIDEL, MISS MARGARET R., New York City:
Banded Rattlesnake.
- STANDFAST, EDWARD C., Flushing, L. I.:
Florida Raccoon.
- STEBER, MRS. PHILIP, New York City:
Saw-Whet Owl.
- STERN, MAX, New York City:
Raccoon.
- STUTSMAN, F. V., Twin Lakes, Pa.:
Banded Rattlesnakes (2 specimens).
- SUTTER & FUCHT, New York City:
Opossum.
- TAMPIER, CHARLES E., New York City:
Timber Rattlesnakes (2 specimens).
- TAUBLES, J., New York City:
Pilot Blacksnakes (2 specimens).
- TAYLOR, WHITE, New York City:
Red-Tailed Hawk.
- THIELMANN, C., Brooklyn, N. Y.:
Ring-Tailed Monkey.
- THOMPSON, MRS. FREDERICK FERRIS, New York City:
Shama Thrush.
- TIBB, MRS. T. J., New York City:
Virginia Cardinal.
- VAILL, H. B., Riverhead, N. Y.:
Blacksnake.
- VAN COTT, THEODORE, Glenwood Landing, L. I.:
Alligator.
- VAN DEUSEN, EARL, Copake Falls, N. Y.:
Timber Rattlesnake.
- VAN VOLKENBURGH, A. J., New York City:
Barred Owl.
- VOLLMER, FRANK, New York City:
Snapping Turtle.
- WALDRON, COLONEL A. E., New York City:
Red-and-Blue-Macaw.
- WASHINGTON, GEORGE, Bellport, L. I.:
Pileated Jays (2 specimens).
- WEIDNER, J. L., New York City:
Gila Monster.
- WELSH, H. B., New York City:
Spotted Turtle.
- WELSH, WILLIAM, Palisade Interstate Park, N. Y.:
Gray Wolves (2 specimens).

- WHITBECK, ISAAC, Copake Falls, N. Y.:
Timber Rattlesnakes (8 specimens).
- WHITE, CHARLES, Buchanan, N. Y.:
Green Heron.
- WILENCHICK, S., New York City:
Screech Owl.
- WILLS, E. C., Greenwich, Conn.:
Loon.
- WIRZ, J. J., Albany, N. Y.:
Box Tortoises (6 specimens).
- WOOD, CHARLES B., New York City:
Central American Boa.
- WOODWARD, K. N., Blairstown, N. J.:
2 Red-Billed Green Toucans, 2 Red-Tailed Chachalacas, 1 South American
Stone Plover. Total, 5 specimens.
- WYDLOWSKA, MISS STELLA, New York City:
Woodchuck.
- ZINKLAND, JOSEPH, Brooklyn, N. Y.:
Opossum.

Library
BY GIFT.

- ASSOCIATED MOUNTAINEERING CLUBS OF NORTH AMERICA, through LEROY JEFFERS,
Secretary, New York City:
The Forests of New York, by A. B. Recknagel.
Our Vanishing Forests, by Arthur Newton Pack.
Nature in American Literature, by Norman Foerster.
Snow and Ice Sports, by Elon Jessup.
Climbs on Alpine Peaks, by A. A. Ratti.
Down the Mackenzie, by Fullerton Waldo.
Wild Animal Homesteads, by Enos A. Mills.
Old Indian Trails, by Walter McClintock.
The Assault on Mount Everest, by C. G. Bruce.
Beautiful America, by Vernon Quinn.
- GRANT, MADISON, New York City:
Natural History of the Animal Kingdom, by S. C. Goodrich. 2 Vols.
The Congo Expedition: Scientific Results, by Lang-Chapin. Vols. I, II, III.
Les Animaux, by Lieutenant Chollet, Armand Dayot, Henri Neuville,
A. Schalek de la Faverie and Doctor Behring. 2 Vols.
Zoological Society Bulletin. June 1897-Nov. 1915. 3 Vols.
Zoological Society Bulletin. October 1906-November 1913. Vol. II.
Dictionary of Science, Literature and Art, by W. T. Brande.
A Dictionary of the English and German Languages, by Chr. Fr. Grieb.
The Congo Expedition: Scientific Results, by Lang-Chapin. Vols. IV and V.
- NEW YORK BOTANICAL GARDEN, LIBRARY OF, New York City:
The Reptiles of Western North America, by John Van Denburgh. Vol. I.
Lizards.
The Reptiles of Western North America, by John Van Denburgh. Vol. II.
Snakes and Turtles.

National Collection of Heads and Horns
BY GIFT.

- LAWRENCE, TOWNSEND, New York City:
Woodland Caribou (*Rangifer tarandus caribou*). Mounted head.

WINANS, WALTER, Bequest, on deposit by American Museum of Natural History,
New York City:

European Bison (*Bos europeus*). Mounted Head.

Sika Deer (*Cervus sika*). 3 Mounted Heads.

Fallow Deer (*Dama vulgaris*). Mounted Head.

Red Deer (*Cervus elaphus*). Mounted Head.

European Brown Bear (*Ursus arctos*). 2 Mounted Heads.

European Wild Boar (*Sus scrofa*). 2 Mounted Heads.

Altai Wapiti (*Cervus asiaticus*). Antlers.

Lioness (*Felis leo*). Mounted Head.

LIST OF ACCESSIONS BY THE
New York Zoological Society

AT THE AQUARIUM.

1923

BY GIFT.

- ASLAKSEN, ARTHUR, Brooklyn, N. Y.:
Box Tortoise.
- BENNETT, W. C., Red Bank, N. J.:
Young Bullheads (13 Specimens).
- BERTELSEN, MISS ELIZABETH, New York City:
Painted Turtle.
- BOYER, GEORGE, New York City:
Young Painted Turtles (2 specimens).
- BREDT, E. A., New York City:
Young Alligator.
- BROWN, CHARLES H., New York City:
Young Alligator.
- BROWN, MRS. J., Brooklyn, N. Y.:
Wood Turtles (2 specimens).
- BROWNE, C. E., St. Petersburg, Fla.:
Soft-shelled Turtle.
- BURGER, F. E., New York City:
Young Alligator.
- CAPLAN, O. C., New York City:
Young Alligator.
- CARLSON, G., Brooklyn, N. Y.:
Box Tortoise.
- CARTER, P. M., Vineland, N. J.:
Young Alligator.
- DAVENPORT, ELMER, Newark, N. J.:
Bullfrog.
- DIETSEL, DR. C. J., New York City:
Young Alligator.
- EASTERN BROOK TROUT GROWERS' ASSOCIATION, Brooklyn, N. Y.:
Brook Trout (12 specimens).
- FISCHER, A. B., New York City:
Horseshoe Crab.
- FISHKIN, HERMAN, Brooklyn, N. Y.:
Young Alligator.
- FLORIDA EAST COAST HOTEL Co., New York City:
Mounted fishes from Florida (5 specimens).
- FRIEDRICH, G., Quebec, Canada:
Crayfish (4 specimens).

- GIBSON, MRS. T. A., Brooklyn, N. Y.:
White Coral.
- GILLWAY, R., Brooklyn, N. Y.:
Young Alligator.
- GRANT, MAJOR CHAPMAN, Schofield Barracks, Honolulu, Hawaii:
25 large hermit crabs in Turbo shells, collected on Wake Island.
- HALE, MISS LUCY, Yonkers, N. Y.:
Young Lesueur's Turtle.
- HANNAN, G., New York City:
Box Tortoise.
- HARKINS, WILLIAM P., Brooklyn, N. Y.:
Young Alligator.
- HELMEL, FRANK, Hoboken, N. J.:
Young Alligator.
- HOLBROOK, F. S., New York City:
Young Alligator.
- JANISEK, JOHN, New York City:
Painted Turtle.
- KANOUSE, MISS ALICE, New York City:
Wood Turtle.
- KENT, MISS BETTY, Ridgewood, N. J.:
Young Alligator.
- KINNARRI, MRS., New York City:
Box Tortoise.
- KUHN, ROBERT, Richmond Hill, N. Y.:
Young Alligator.
- MARSCHER, AGUATUS A., Princess Bay, N. Y.:
Young Alligator.
- MENDELSON, MASTER CURTIS, New York City:
Painted Turtle.
- MURAKANN, R., New York City:
Young Green Turtle.
- MYERS, GEORGE S., Jersey City, N. J.:
Painted Turtle.
- NESSLER, C. G., New York City:
Young Alligators (2 specimens).
- NEW YORK ZOOLOGICAL PARK, New York City:
Galapagos Penguin, Flightless Cormorant.
- PORT, CAPTAIN, New York City:
Young Green Turtle.
- PROCTOR, MRS. L. SANFORD, Greenwich, Conn.:
Balanced Aquaria.
- PUCCIARELLI, MASTER P., New York City:
Wood Turtle.
- RICHARDS, MASTER HOWARD A., Elizabeth, N. J.:
Spotted Turtle, Newt.
- ROSEN, PHILIP, South Fallsburg, N. Y.:
Snapping Turtle.
- SCHUMACHER, H., Jersey City, N. J.:
Young Alligator.
- SEARS, MRS. E., New York City:
Young Alligator.
- SMITH, MRS. C. D., New York City:
Young Alligator.

- STRITTMATTER, J. M., Garden City, N. Y.:
Young Alligator.
- SWABODA, ANGELUS, New York City:
Snapping Turtle.
- TAYLOR, G. P., New York City:
Young Alligator.
- TEFFT, MRS. C. E., St. George, Staten Island, N. Y.:
Box Tortoise Eggs.
- UNDERWOOD, C. R., East Orange, N. J.:
Young Alligator.
- VAN BLARCOM, MRS. J. W., Norwood, N. J.:
Young Alligators (2 specimens).
- VOGEL, MR., Brooklyn, N. Y.:
Horseshoe Crab.
- WILLIAMS, R. G., Richmond Hill, N. Y.:
Young Alligator.
- WOLFE, MRS. RAY F., Munsonville, N. H.:
Spotted Salamander.
- WOODCOCK, MISS E. M., East Orange, N. J.:
Young Alligator.
- ZILSKE, R. B., Nutley, N. J.:
Young Alligator.

PURCHASED BY THE SOCIETY.

Fresh Water.—Lake Sturgeon, 3; Lake Trout, 4; Long-nosed Gar, 1; Carp, 1; Cabomba, 500 sprays.

Salt Water, Local.—Fishes numbering 2,872, representing 51 species, were collected by the well-boat *Seahorse* or purchased from pound nets in the lower New York Bay. In addition there were purchased from the pound nets 1,188 invertebrates of 12 species and 7 sea turtles of 2 species.

Salt Water, Tropical.—Blue Angel, 38; Black Angel, 61; French Angel, 12; Queen Angel, 3; Yellow-tail Angel, 2; Hogfish, 21; Schoolmaster, 89; Porkfish, 108; Gray Snapper, 11; Nassau Grouper, 9; Muttonfish, 11; Blue-striped Grunt, 7; Gray Grunt, 18; White Grunt, 8; Golden Grunt, 5; Yellow-striped Grunt, 1; Yellow Grunt 6; Yellow Tail, 9; Spot Snapper, 49; Spadefish, 5; Doctorfish, 19; Scamp, 1; Sheepshead, 3; Black Grouper, 4; Rock Hind, 3; Parrotfish, 50; Porgy, 4; Mud Parrotfish, 3; Dog Snapper, 1; Salema, 3; Queen Triggerfish, 2; Bermuda Chub, 4; Margatefish, 8; Black Margatefish, 3; Red Hind, 1; Squirrelfish, 2; Graysby, 1; Shark Sucker, 1; Jewfish, 2; Filefish, 10; Sergeant Major, 56; Beau Gregory, 75; Butterfly Fish, 30; Trunkfish, 10; Cowfish, 20; Catfish, 1; Plum-colored Parrotfish, 2; Permit, 5; Blue Tang, 2; Bonefish, 1; Green Moray, 2; Spotted Moray, 2; Small Grunts, etc., 10; Stone Crab, 12; Spiny Lobster, 12. Total—838 specimens of 55 species. Half of this collection was sold to the Philadelphia Aquarium at its cost to the Society.

SPECIMENS RECEIVED BY EXCHANGE.

FAIRMOUNT PARK AQUARIUM, Philadelphia, Pa.:
Carp, 20; Goldfish, 40; Catfish, 19; Common Roach, 28; Common Sunfish, 60; Calico Bass, 125.

COLLECTED BY EMPLOYEES.

Fresh Water.—Pearl Roach, 1,500; Common Sunfish, 2,900; Goldfish, 26; Minnows, 24; White Perch, 165; Yellow Perch, 800; Carp, 3; Catfish, 6; Black Bass, 6.

Salt Water.—(Not including *Seahorse* collections) Sea Anemones, 600; Starfish, 50; Smooth and Ribbed Mussels, 1,000.

Fish Donated by N. J. FISH and Game Commission.
 Brook Trout, 27; Brown Trout, 16; Rainbow Trout, 34.
 Fish Eggs Donated for the Hatchery—1,097,000.
 By the U. S. BUREAU OF FISHERIES, Washington, D. C.:
 1,000,000 Whitefish—New York.
 10,000 Lake Trout—New York.
 10,000 Black-spotted Trout—Montana.
 10,000 Rainbow Trout—Virginia.
 5,000 Chinook Salmon—Pacific Coast.
 By TUXEDO FISHERIES, Tuxedo Park, N. Y.:
 45,000 Brook Trout.
 17,000 Brown Trout.

The Aquarium Library BY GIFT.

AMERICAN MUSEUM OF NATURAL HISTORY, New York City:
Natural History, Guide Leaflets, Annual Report.
 BIGELOW, DR. EDWARD F., Sound Beach, Conn.:
The Guide to Nature.
 BROOKLYN INSTITUTE OF ARTS AND SCIENCES, Brooklyn, N. Y.:
Annual Report, Museum News and Quarterly.
 BUFFALO SOCIETY OF NATURAL SCIENCES, Buffalo, N. Y.:
Hobbies.
 CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.:
Proceedings.
 CALIFORNIA BOARD OF FISH AND GAME COMMISSIONERS, Sacramento, Calif.:
California Fish and Game.
 CHILDREN'S MUSEUM OF BOSTON, Boston, Mass.:
Annual Report.
 COLORADO MUSEUM OF NATURAL HISTORY, Denver, Col.:
Annual Report.
 FISHING GAZETTE PUBLISHING COMPANY, New York City:
The Fishing Gazette.
 LANCASHIRE SEA-FISHERIES LABORATORY, Liverpool, England:
Report for 1922
 LIVERPOOL MARINE BIOLOGY COMMITTEE, Liverpool, England:
Annual Report, 1922, Marine Biological Station at Port Erin, Isle of Man (through Prof. W. A. Herdman, Director).
 MINNESOTA STATE GAME AND FISH DEPARTMENT, St. Paul, Minn.:
Fins, Feathers and Fur.
 NATURAL HISTORY SURVEY OF ILLINOIS, Urbana, Ill.:
Bulletin.
 ROTH, AUGUST M., Baltimore, Md.:
Aquatic Life.
 SMITHSONIAN INSTITUTION, Washington,, D. C.:
Special Papers.
 TOWNSEND, CHARLES H.:
Observations on a Salmon River, by F. Gray Griswold.
 U. S. BUREAU OF FISHERIES, Washington, D. C.:
Reports, Bulletins and Circulars.
 U. S. NATIONAL MUSEUM, Washington, D. C.:
Annual Report, 1922.

BY PURCHASE.

The Biology of the Sea-Shore, by Flattely and Walton.
The Fish Culturist.

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Founders	8
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Annual Members	2,230
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January 1, 1924

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- FLEITMANN, WILLIAM MEDLICOTT,
- FLINT, CHARLES R.,
- FORD, HENRY,
- FOSDICK, RAYMOND B.,
- FOSTER, EUGENE G.,
- FOWLER, A. A.,
- FRASER, MISS S. GRACE,
- *FRENCH, S. BARTON,
- FRERE, HAROLD,
- FRICK, CHILDS,
- FUGUET, HOWARD,
- *GARNER, R. L.,
- GERRY, ELBRIDGE T.,
- GIFFORD, DR. HAROLD,
- GOLDSCHMIDT, S. A.,
- GOODRIDGE, MRS. F. G.,
- *GOODWIN, JAMES J.,
- GOULD, GEORGE H.,
- GRANT, DE FOREST,
- GRINNELL, GEORGE BIRD,
- GUGGENHEIM, DANIEL,
- GUGGENHEIM, S. R.,
- GUNTHER, BERNARD G.,
- GUNTHER, FRANKLIN L.,
- GUTHRIE, WILLIAM D.,
- *HAGENBECK, CARL,
- HAGENBECK, HEINRICH,
- HAGENBECK, LORENZ,
- HAGGIN, LOUIS T.,
- HALLS, WILLIAM, JR.,
- HALSEY, HERBERT DRAKE,
- HAMILTON, PIERPONT MORGAN,
- HARDING, J. HORACE,
- HARKNESS, MRS. EDWARD S.,
- HARKNESS, MRS. S. V.,
- HARKNESS, MRS. WILLIAM L.,
- HARRAH, CHARLES J.,
- HARRIMAN, MRS. E. H.,
- HARRIS, ALAN C.,
- HARRISON, ARCHIBALD,
- HARRISON, SIR J. B.,
- HART, FRANK,
- HARVEY, ELI,
- HAUPT, DR. LOUIS,
- HAVEMEYER, F. C.,
- HAVEMEYER, THEODORE A.,
- *HAVEN, GEORGE G.,
- *HEARN, GEORGE A.,
- *HENDERSON, CHARLES R.,
- *HIGGINSON, JAMES J.,
- HILL, CLARENCE H.,
- HILL, HUGH,
- HILLS, MRS. JOHN,
- *HINCHMAN, WALTER,
- HITCH, MRS. FREDERICK DELANO,
- *HOE, MISS MARGARET,
- HOE, RICHARD M.,

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- HOE, MRS. RICHARD M.,
 HOLMES, C. R.,
 *HOPKINS, GEORGE B.,
 HOPPIN, MRS. JOSEPH CLARK,
 HOYT, THEODORE R.,
 HUBBARD, JOHN,
 *HUBBARD, THOMAS H.,
 HUNT, RICHARD H.,
 HUNTINGTON, H. E.,
 HYDE, MRS. CLARENCE M.,
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 ISELIN, ADRIAN, JR.,
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 ISLER, PAUL A.,
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 JACKSON, DR. VICTOR H.,
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 JENNINGS, OLIVER G.,
 JENNINGS, MRS. OLIVER G.,
 JONES, CHARLES H.,
 JONES, MRS. EDWARD H.,
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 KANE, GRENVILLE,
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 KIDDER, NATHANIEL T.,
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 *KINGSLAND, WILLIAM M.,
 *KISSEL, GUSTAV E.,
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 LAFARGE, C. GRANT,
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 LANIER, CHARLES,
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 LEEDS, MRS. WARNER M.,
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 *LOUNSBERRY, BEN-ALI H.,
 *LOUNSBERRY, RICHARD P.,
 *LOW, C. ADOLPHE,
 *LOW, SETH,
 *LYDIG, DAVID,
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 *MCKIM, CHARLES F.,
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 *MAITLAND, ALEXANDER,
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 *SHERMAN, WILLIAM WATTS,
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 *SLOAN, JOHN,
 *SLOAN, SAMUEL,
 SLOAN, SAMUEL,
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 *THALMAN, ERNST,
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 *THOMPSON, WILLIAM P.,
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 WARBURG, FELIX M.,
 *WARREN, SAMUEL D.,
 *WATSON, FRANCIS A.,

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*WATSON, JAMES S.,
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 *WETMORE, GEORGE PEABODY,
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 *WHITEHEAD, PAUL,
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 *WORTINGHINGTON, C. C.,
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 WHITNEY, PAYNE,
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 WILLETS, HOWARD,
 WILLIAMS, CLARK,
 WILLIAMS, WILLIAM,
 *WING, JOHN D.,
 WING, JOHN MORGAN,
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- AUCHINCLOSS, MRS. HUGH,
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 BAKER, STEPHEN,
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 BALDWIN, HENRY DEFOREST,
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 BALLANTINE, ARTHUR A.,
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 BALLARD, SUMNER,
 BAMBACH, CHRISTIAN,
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 BANNARD, OTTO T.,
 BARBER, THOMAS H.,
 BARBEY, HENRY G.,
 BARBOUR, F. K.,
 BARCLAY, MRS. JAMES L.,
 BARCLAY, MRS. REGINALD,
 BARNARD, J. AUGUSTUS,
 BARNES, CORTLANDT D.,
 Barnes, Henry B.
 Barnes, James,
 Barnett, Chester P.,
 BARNEY, ASHBELL H.,
 BARNEY, EDGAR S. SC.D.
 BARNEY, MRS. J. STEWART,
 BARNUM, WILLIAM M.,
 BARON, WILLIAM S.,
 BARRET, CECIL,
 BARRON, GEORGE D.,
 BARSTOW, MRS. F. Q.,
 BARTLETT, PHILIP G.,
 BARTOL, HENRY G.,
 BARTON, EDWARD RITTENHOUSE,
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 BASS, DR. MURRAY H.,
 BATES, DR. W. H.,
 *BATTERSON, JAMES G.,
 BAUCHLE, THOMAS H., JR.,
 BAUER, OSWALD, A.,
 BAUER, WALTER,
 BAVA, FELICE,
 BAXTER, MRS. DON A.,
 BAYLIES, EDMUND L.,
 BAYNE, MRS. L. P.,
 BEACH, WILLIAM N.,
 BEADLESTON, MISS EDITH,
 BEAL, MRS. ROBERT C.,
 BEALE, PHELAN,
 BEALL, JEREMIAH,
 BECKWITH, SIDNEY FORBES,
 BEERS, MRS. E. LEGRAND,
 BEHREND, DR. OTTO F.,
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 BELL, LOUIS V.,
 BELL, PARK E.,
 BELLER, A.,
 BELLER, WILLIAM F.,
 BEND, MRS. GEORGE,
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 BENEDICT, LEMUEL C.,
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 BENKARD, J. PHILIP,
 BENSON, R. LAWRENCE,
 BERDAN, TEMPLE T.,
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 BERGH, HENRY,
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 BERNHEIM, GEORGE B.,
 BERNHEIM, HENRY J.,
 BERNHEIMER, CHARLES L.,
 *BEROLZHEIMER, E.,
 BERTRON, S. R.,
 BEST, MRS. CHARLES B.,
 BETHELL, F. H.,
 BIDDLE, WILLIAM C.,
 BIER, MRS. SYLVAN,
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 BILLINGS, C. K. G.,
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 BISLAND, P. E.,
 BLACK, MRS. ROBERT C.,
 BLAGDEN, GEORGE,
 BLAGDEN, MRS. GEORGE,
 BLAGDEN, MRS. JULIA G.,
 BLAIR, CHAS. H.,
 BLAIR, J. INSLEY,

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BLAIR, MRS. LEDYARD,
 BLAKE, MISS JOAN,
 BLAKE, MRS. JOSEPH,
 BLAKE, MISS KATHERINE,
 BLAKE, WM. ALEXANDER DUE,
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 BLISS, MISS S. D.,
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 BLODGETT, THOMAS H.,
 BLOODGOOD, ROBERT F.,
 BLOOMINGDALE, IRVING I.,
 BLOOMINGDALE, MRS. JOSEPH E.,
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 BLUMENTHAL, HUGO,
 BLUMENTHAL, SIDNEY,
 BLUNDELL, E. T.,
 BOARDMAN, KENNETH,
 BOARDMAN, MISS R. C.,
 BOESE, QUINCY WARD,
 BOETTGER, MISS PAULINE,
 BOETTGER, THEODORE,
 POISSEVAIN, G. L.,
 BOLTON, MISS ELLA F.,
 BOLTON, MISS EMILY L.,
 BOLTON, WILLIAM H.,
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 BOND, STEPHEN N.,
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 CLARK, HERBERT L.,
 CLARK, J. FRANCIS ALOYSIUS,
 CLARK, MRS. J. F. A.,
 CLARK, JAMES L.,
 CLARK, MRS. JOHN C.,
 CLARK, J. WILLIAM,
 CLARK, JOHN W.,
 CLARK, W. A.,
 CLARKE, E. A. S.,
 CLARKE, LEWIS L.,
 CLARKE, THOMAS B.,
 CLARKSON, MISS ANNIE,
 CLAUSEN, GEORGE,
 CLEMENS, DR. JAMES B.,
 CLINCH, EDWARD S.,
 CLOSE, WALTER H.,
 CLOWES, F. J.,
 CLOWES, FREDERICK V.,
 *CLYDE, WILLIAM P.,
 COAKLEY, C. G., M. D.,
 COCHRAN, MRS. GIFFORD A.,
 COCHRAN, G. D.,
 COCHRANE, A. W. S.,
 COCKCROFT, MISS E. V.,
 CODDINGTON, JOHN INSLEY,
 COFFIN, EDMUND,
 COFFIN, FRANCIS A.,
 COFFIN, MRS. STURGIS,
 COFFIN, WILLIAM EDWARD,
 COLBURN, ALBERT E.,
 COLE, EDWARD F.,
 COLE, MRS. RUFUS,
 COLEBROOK, CHAS. B.,
 COLEMAN, C. P.,
 COLGATE, GILBERT,
 COLGATE, HENRY A.,
 COLGATE, MRS. S. M.,
 COLKET, J. HAMILTON,
 COLLIER, MRS. R. J.,
 COLLINS, MAJOR ALFRED M.,

*DECEASED

COLT, HARRIS D.,
 COLT, RICHARD C.,
 COLTON, CHESTER LEE,
 COMSTOCK, MRS. H. G.,
 CONBOY, MARTIN,
 CONE, FREDERICK H.,
 CONHEIM, HERMANN,
 CONKLING, PAUL BURLEIGH,
 CONNELL, HERBERT STANLEY,
 CONNFELT, CHARLES M.,
 CONOVER, H. B.,
 CONROY, WM. H.,
 CONSTABLE, MRS. HOWARD,
 CONSTANTIAN, DR. RALPH S.,
 CONTENT, HARRY,
 CONVERSE, MISS MARY E.,
 CONYNGHAM, JOHN N.,
 COOK, MRS. CHARLES T.,
 COOPER, HENRY S. FENIMORE,
 COOPER, MRS. M. LEBRUN,
 CORBIN, AUSTIN,
 CORIELL, WILLIAM WALLACE,
 CORLIES, HOWARD,
 CORNELL, MISS EMILY LEFFERTS,
 CORNETT, MRS. GARDNER,
 CORNING, C. R.,
 COSTER, CHARLES HENRY,
 COYKENDALL, FREDERICK,
 CRABBE, MISS LOUISE G.,
 CRAIG, BURDETTE P.,
 CRANE, MRS. JONATHAN H.,
 CRANE, MRS. W. MURRAY,
 CRAVATH, MRS. PAUL D.,
 CRAWFORD, WILLIAM,
 CRIMMINS, CYRIL,
 CRIMMINS, MISS MARY C.,
 CRIMMINS, THOMAS,
 CROCKER, GEORGE A., JR.,
 CROCKER, WILLIAM T.,
 CROMWELL, JAMES W.,
 CROMWELL, LINCOLN,
 CROSBY, MAUNSELL S.,
 CROSS, GEORGE D.,
 CROSS, MISS MARY R.,
 CROSS, MRS. R. J.,
 CROSSLEY, G. REGINALD,
 CUNNINGHAM, W. DE L.,
 CURIE, CHARLES,
 CURIEL, H.,
 CURREY, J. B.,
 CURTIS, CHARLES P.,
 CURTIS, F. K.,
 CURTIS, MRS. H. HOLBROOK,
 CURTIS, MRS. JENNETTE C.,
 CUSHMAN, B. A.,
 CUTLER, JOHN W.,
 CUTTER, RALPH L.,
 CUTTING, HEYWARD,
 CUTTING, R. FULTON,
 CUTTING, MRS. W. BAYARD,
 CUYLER, MISS ELEANOR DEG.,
 DAILEY, GRANVILLE F.,
 DALLETT, FREDERIC A.,
 DALZIEL, MRS. F. Y.,
 DAMROSCH, FRANK,
 DANA, PAUL,
 DANE, MRS. ERNEST B.,
 DANIELS, MRS. LORENZO,
 DARBY, DAVID M.,
 DARLING, JOSEPH WARREN,
 DAVENPORT, MRS. IRA,
 DAVENPORT, WILLIAM B.,
 DAVIDGE, WILLIAM H.,
 DAVIES, ALLEN B.,
 DAVIES, J. CLARENCE,
 DAVIS, MRS. CECIL CLARK,
 DAVIS, GHERARDI,
 DAVIS, HOWLAND,
 DAVIS, MORGAN,
 DAVIS, WATERS S.,
 DAVISON, MISS ALICE M.,
 DAVISON, MISS ELLA H.,
 DAVISON, F. TRUBEE,
 DAVISON, MRS. HENRY P.,
 DAY, MISS LAURA V.,
 DAYTON, CHARLES W.,
 DEACON, DR. J. D.,
 DEANE, HARRY TENISON,
 DE CLAIRMONT, DR. A.,
 DE FOREST, JOHNSTON,
 DEFOREST, ROBERT W.,
 DEGENER, J. F.,
 DEGIOCOURIA, A. V.,
 DE HEREDIA, MRS. CARLOS M.,
 DE KAY, MRS. SIDNEY,
 DELAFIELD, EDWARD C.,
 DELAFIELD, FREDERICK P.,
 DELAFIELD, LEWIS L.,
 DELANO, LYMAN,
 DELANO, MOREAU,
 DE LANOY, WILLIAM C.,
 deLAUGIER-VILLARS, COUNTESS,
 DELONG, FRANK F.,
 DE LONG, MRS. GEORGE B.,
 DEMING, L. C.,
 DENBY, EDWIN H.,
 DEPEW, CHAUNCEY M.,
 DERHAM, MRS. CHAS., JR.,
 DERHAM, MRS. H. CASIMIR,
 DESPARD, WALTER D.,
 DETMER, JULIAN F.,
 DE VEAU, MRS. F. C.,
 DEVEREUX, WALTER B.,
 DEVINNE, T. B.,

DEVOTION, MISS HARRIET N.,
 DEXTER, GEORGE M.,
 DEYO, ROBERT E.,
 DEZALDO, FREDERICK,
 DICK, MRS. FAIRMAN ROGERS,
 DICKERSON, E. N.,
 DICKEY, MRS. CHARLES D.,
 DICKINSON, MRS. JOHN M.,
 DIEHL, GEORGE H., JR.,
 DIENST, A. P.,
 DIKE, OSCAR D.,
 DILLON, HERBERT LOWELL,
 DILWORTH, JOS. R.,
 DIX, MRS. ALFRED P.,
 DIXON, F. E.,
 DIXON, THEODORE P.,
 DOANE, BENJAMIN H.,
 DODD, ALFRED W.,
 DODGE, MRS. ARTHUR M.,
 DODGE, PRESIDENT BAYARD,
 DODGE, CLEVELAND E.,
 DODGE, MRS. CLEVELAND H.,
 DOHERTY, MISS MARY,
 DOHME, JOHN L.,
 DOMINICK, BAYARD,
 DOMINICK, GAYER G.,
 DOMINICK, H. BLANCHARD,
 DOMMERICH, OTTO L.,
 DONALD, MISS ANNA E.,
 DONALDSON, ROBERT M.,
 DOREMUS, F. S.,
 DOUBLEDAY, F. N.,
 DOUGLAS, MISS ELIZABETH,
 DOUGLAS, WALTER,
 DOUGLAS, WILLIAM H.,
 DOWD, MRS. JOSEPH,
 DOWD, WYLlys E., JR.,
 DOWNER, J. HALSEY,
 DOWNER, WILLIAM J.,
 DOWNEY, JOHN I.,
 DOWNEY, DR. JOHN OTHO,
 DOWS, MRS. DAVID, SR.,
 DOWS, TRACY,
 DRAKE, MISS MARY E.,
 DRAPER, ERNEST G.,
 DRAPER, JOHN M.,
 DRAPER, DR. WILLIAM K.,
 DRAYTON, J. COLEMAN,
 DRAYTON, W. HEYWARD, 3RD.,
 DREIER, MISS KATHERINE,
 DREW, CORNELIUS,
 DREXEL, MRS. JOHN R., SR.,
 DREXEL, JOHN R., JR.,
 DREXEL, MRS. JOHN R., JR.,
 DRIGGS, LAURENCE LA TOURETTE,
 DRUMMOND, I. WYMAN,
 DUANE, ARTHUR,
 DUANE, MRS. JAMES MAY,
 DUBOIS, EUGENE,
 DU BOIS, MRS. MATTHEW B.,
 DUEL, DR. ARTHUR B.,
 DUEER, MRS. JOHN BEVERLEY,
 *DUNCAN, MRS. JOHN P.,
 DUNCAN, STUART,
 DUNCAN, MRS. STUART,
 *DUNDAS, RALPH WURTS,
 DUNHAM, LEWIS L.,
 DUNNE, MRS. FINLEY PETER,
 *DUPIGNAC, FRANK J.,
 DU PONT, H. F.,
 *DURKEE, A. W.,
 DURKEE, MRS. A. W.,
 DURKEE, RICHARD P. H.,
 DURKEE, MRS. R. P. H.,
 DURYEA, MRS. H. B.,
 DUTCHER, JOHN, GEROW,
 DUVAL, MRS. HORACE C.,
 DWIGHT, MISS ADELIA A.,
 DWIGHT, JOHN E.,
 DWIGHT, JONATHAN, M. D.,
 DWIGHT, MRS. M. EVERETT,
 DWIGHT, MRS. WINTHROP E.,
 EAGLE, JOHN H.,
 EASTON, CHARLES PHILIP,
 EATON, MRS. FREDERICK H.,
 EATON, GEO. L.,
 EBERSTADT, FERDINAND,
 ECK, WILLIAM J.,
 ECKART, EDMUND,
 EDEN, JOHN H.,
 EDGAR, HERMAN L. R.,
 EDGAR, MRS. NEWBOLD LEROY,
 EDGAR, WILLIAM S.,
 EDISON, MRS. THOMAS A.,
 EDMONDS, JOHN W.,
 EDWARDS, DR. GEORGE VAIL,
 EGERTON, MAURICE,
 EHRENREICH, ALFRED,
 EIRET, LOUIS J.,
 EHRMAN, MRS. ERNEST,
 EIDLITZ, ROBERT JAMES,
 EILERS, KARL,
 EINHORN, DR. MAX,
 EINSTEIN, I. D.,
 ELDREDGE, FREDERICK L.,
 ELDREDGE, LEWIS A.,
 ELDREDGE, WILLIAM T.,
 ELLIOTT, HOWARD,
 ELLSWORTH, JOHN S.,
 ELMENDORF, DR. TEN EYCK,
 EMANUEL, J. H., JR.,
 EMBURY, MISS EMMA C.,
 EMMET, MISS LYDIA F.,

*DECEASED

EMMET, ROBERT TEMPLE,
 ERDMANN, MARTIN,
 ERDMANN, WILLIAM,
 ERLANGER, MILTON S.,
 ESSBERG, HENRY,
 ETTLINGER, LOUIS,
 EUSTIS, JOHN E.,
 EVANS, S. M.,
 EVANS, VICTOR J.,
 EVARTS, MISS MARY,
 EVELAND, FRANK,
 EVERETT, A. L.,
 EWING, GEORGE R. M.,
 EWING, MRS. THOMAS,
 EYER, GEORGE A.,
 FABBRI, ERNESTO G.,
 FABBRI, MRS. ERNESTO G.,
 FABER, EBERHARD,
 FAHNESTOCK, DR. ERNEST,
 FAHNESTOCK, MRS. ERNEST,
 FAHNESTOCK, HARRIS,
 FAHNESTOCK, WILLIAM,
 FAIRCHILD, BENJAMIN L.,
 FAIRCHILD, BENJAMIN THOMAS,
 FAIRCHILD, MRS. C. S.,
 FAIRCHILD, SAMUEL W.,
 FALLS, MRS. DEWITT CLINTON,
 FARLEY, MRS. GUSTAVUS, JR.,
 FARNAM, WM. W.,
 FARRAND, MAX,
 FAY, FRANCIS B.,
 FECHTIG, DR. ST. GEORGE,
 FELDMAN, O. A.,
 FERGUSON, E. J.,
 FERGUSON, WILLIAM C.,
 FERRY, MANSFIELD,
 FEUSS, MAJOR ANDREW W.,
 FEUSTMAN, LEON P.,
 FIELD, MRS. AUGUSTUS B.,
 FIELD, HENRY, F. R. A. I.,
 FIELD, MRS. MARSHALL,
 FILLEY, F. HERBERT,
 FINCKE, MRS. REGINALD,
 FISCHER, WILLIAM H.,
 FISCHLIN, MISS LOUISE A.,
 FISH, MRS. HAMILTON,
 FISHER, EDWIN A.,
 FISHER, G. CLYDE,
 FITZHUGH, JOHN L.,
 FITZPATRICK, FRANK J. E.,
 FLAGLER, HARRY HARKNESS,
 FLEISCHMANN, UDO M.,
 FLEITMANN, FREDERICK T.,
 FLEMING, MATTHEW C.,
 FLETCHER, HENRY,
 FLORSHEIM, HARRY A.,
 FLOYD-JONES, EDWARD H.,
 FOOT, SANDFORD DWIGHT,
 FORBIN, VICTOR,
 FORDYCE, JOHN A.,
 FORREST, ARCHIBALD A.,
 FOSBURGH, JAMES B. A.,
 FOSHAY, P. MAXWELL,
 FOSTER, EDWARD W.,
 FOSTER, FRANK B.,
 FOSTER, GIRAUD,
 FOSTER, HOWARD CROSBY,
 FOSTER, MACOMB G.,
 FOULK, MRS. MABEL P.,
 FOULK, THEODORE,
 FOWLER, MRS. ANDERSON,
 FOWLER, MRS. ARTHUR,
 FOWLER, RUSSELL S., M.D.,
 FOX, MISS ALICE BLEECHER,
 FOX, AUSTIN G.,
 FOX, FREDERICK P.,
 FRANK, EMIL,
 FRANK, LOUIS,
 FRASER, ALEX. J.,
 FRASER, ALEX. V.,
 FRASER, MISS ANN C.,
 FRASER, MRS. GEORGE C.,
 FRASER, MISS JANE G.,
 FRASER, MISS J. K.,
 FRASER, MISS SARAH,
 FRASER, WM. A.,
 FRAZER, E. W.,
 FREDERICK, MRS. LEOPOLD,
 FREEDMAN, LEO,
 FREEMAN, MISS GERTRUDE A.,
 FRENCH, DANIEL C.,
 FRENCH, MRS. JOHN,
 FRIES, DR. HAROLD H.,
 FRISSELL, A. S.,
 FRITH, MISS LOUISE S.,
 FROMM, S. W.,
 FROST, AARON V.,
 FROTHINGHAM, C. FREDERICK,
 FROTHINGHAM, JOHN W.,
 FROTHINGHAM, WM. I.,
 FRUEAUFF, FRANK W.,
 FULD, FELIX,
 FULL, JOHN H.,
 FULLER, CHARLES D.,
 FULLER, MRS. EUGENE,
 FUNKE, EDMUND A.,
 GAILLARD, MRS. WM. D.,
 GALBAN, EUGENIO,
 GALLAND, MISS BERTHA,
 GALLAND, NATHANIEL K.,
 GALLATIN, ALBERT,
 GALLATIN, MRS. ALBERT,
 GALLATIN, GOELET,
 GALLATIN, MRS. GOELET,

- GALLAWAY, MERRILL W.,
 GALLOWHUR, W. G.,
 GANO, M. W., JR.,
 GANSS, HERMAN O.,
 GARDINER, CHARLES B.,
 *GARDNER, MRS. ALFRED W.,
 GARRARD, MISS MARGARET H.,
 GARRETT, JOHN W.,
 GARRETT, MISS LAURA B.,
 GARRETTSON, MISS HELEN JAY,
 GARRISON, C. M.,
 GATES, MOODY B.,
 GAWTRY, LEWIS B.,
 GAYNOR, RUFUS WILLIAM,
 GEDDES, DONALD G.,
 GELLER, MRS. F.,
 GELSHENEN, WM. H.,
 GEORGE, G. K.,
 GERRY, PETER G.,
 GERRY, ROBERT L.,
 GERSTENDORFER, ALBERT,
 GIBB, MRS. H. E.,
 GIBBS, GEORGE,
 GIESEN, MISS LOUISE MARIE,
 GILBERT, CLINTON,
 *GILDERSLEEVE, HENRY A.,
 GILLESPIE, ROBERT McM.,
 *GILLIES, EDWIN J.,
 GILSEY, HENRY,
 GLAZIER, HENRY S.,
 GLEASON, HERBERT P.,
 GLENN, JOHN M.,
 GLYN, W. E.,
 GOADBY, W. H.,
 GODDARD, MRS. FREDERIC N.,
 GODDARD, MRS. MORRILL,
 GODFREY, MRS. E. D.,
 GODLEY, GEORGE McM.,
 GODWIN, FREDERICK M.,
 GOELL, JACOB,
 GOETCHIUS, MRS. J. M.,
 GOLDAN, DR. S. ORMOND,
 GOLDMANN, JULIUS,
 GOLDSMITH, DR. ALFRED N.,
 GOLDWATER, HENRY,
 GOMAN, MRS. HENRY A.,
 GOOD, REV. ROBERT,
 GOOD, MRS. WILLIAM HOWARD,
 GOODHUE, CHARLES E.,
 GOODWIN, GEORGE B.,
 GOODWIN, GRENVILLE,
 GOODWIN, H. SAGE,
 GOODWIN, MRS. J. J.,
 GOODWIN, JAMES L.,
 GOODWIN, JOHN B. L.,
 GOODWIN, WALTER L.,
 GOODWIN, WALTER L., JR.,
 GOTTHELF, CHARLES,
 GOTTHOLD, ARTHUR F.,
 GOTTHOLD, FREDERIC,
 GOULD, CHARLES A.,
 GOULD, C. C.,
 GOULD, CHARLES W.,
 GOULD, EDWIN,
 GOULD, MRS. EDWIN,
 *GRACE, MRS. W. R.,
 GRAF, WILLIAM,
 GRAHAM, MRS. ARTHUR BUTLER,
 GRAHAM, MRS. GEORGE S.,
 GRANT, MRS. DE FOREST,
 GRAVES, GEORGE COE,
 GRAVES, HENRY, JR.,
 GRAY, HENRY G.,
 GREENOUGH, JOHN,
 GREENOUGH, MRS. JOHN
 GREENWOOD, JOSEPH R.,
 *GREER, CHARLES,
 GREER, MRS. LOUIS MORRIS,
 GREGG, WM. C.,
 GREGORY, FRANKLIN U.,
 *GRIEB, WILLIAM G.,
 GRIFFIN, WILLIAM V.,
 GRIFFITH, MISS SUSAN D.,
 GRIGG, HARRY K.,
 GRINNELL, E. MORGAN,
 GRISWOLD, MRS. F. GRAY,
 GRISWOLD, WM. E. S.,
 GROSS, JAMES S.,
 GROSVENOR, MISS ROSA ANN,
 GRUNER, WM. C.,
 GUERNSEY, HENRY W.,
 GUGGENHEIM, HARRY F.,
 GUGGENHEIM, SIMON,
 GUGGENHEIMER, MRS. CHARLES,
 GUGGENHEIMER, MRS. ELIZA,
 GUINZBURG, A. M.,
 GUTMAN, DEWITT,
 GUTTAG, HENRY,
 GWINN, RALPH W.,
 HAAS, GEORGE C.,
 HAFFEN, JOHN M.,
 HAFFEN, MRS. WILHELMINA,
 HAGE, JOHN D.,
 HAIGHT, CHARLES S.,
 HAIGHT, SHERMAN POST,
 HAINES, CHARLES D.,
 HALKETT, MRS. SARAH STOKES,
 HALL, A. C.,
 *HALL, FRANK L.,
 HALL, HENRY J. S.,
 HALL, MISS JANE,
 HALL, WM. W.,
 HALLOCK, CHARLES P.,
 HALSEY, CHARLES W.,

HALSEY, MRS. CHARLES W.,
 HAMANN, WILLIAM A.,
 HAMBLETON, T. EDWARD,
 HAMERSLEY, LOUIS GORDON,
 HAMILTON, MISS ELIZABETH S.,
 HAMILTON, MRS. WILLIAM PIERSON,
 HAMLIN, MRS. HARRY L.,
 HAMMOND, MRS. JOHN HENRY,
 HAMMOND, LYMAN P.,
 HANCE, JOHN A.,
 HAND, MRS. HARRY C.,
 HANSON, MISS BETTY,
 HARD, ANSON W.,
 HARDIN, WILLIAM B.,
 HARMON, MRS. CLIFFORD,
 HARNISCHFEGER, P.,
 HARRIMAN, W. A.,
 HARRIS, ALBERT H.,
 HARRIS, CHARLES C.,
 HARRIS, MRS. VICTOR,
 HARRISON-BERLITZ, V.,
 HARRISON, MRS. W. HENRY,
 HARTSHORNE, J. M.,
 HARTWELL, DR. JOHN A.,
 HASTINGS, MRS. THOMAS,
 HATCH, EDWARD, JR.,
 HATHAWAY, CHARLES,
 HAVEMEYER, HENRY O.,
 HAVEN, GEORGE G.,
 HAVEN, J. WOODWARD,
 HAVENS, ALBERT G.,
 HAWK, MRS. WILLIAM SAMUEL,
 HAWKES, MISS EVA,
 HAY, CLARENCE L.,
 HAYES, ARCHBISHOP,
 HAYES, DR. WM. VAN VALZAH,
 HAYNES, WILLIAM DEFOREST,
 HAZEN, GEORGE H.,
 HECHT, RUDOLF,
 HECK, GEORGE C.,
 HECKSCHER, MRS. AUGUST,
 HEDGES, JOB E.,
 HEGEMAN, ALBERT CLARENCE,
 HEIDE, MISS BERTHA,
 HEIDE, MISS CLARA,
 HEIDE, HENRY, JR.,
 HEIDE, HERMAN L.,
 HEIDE, JULIUS A.,
 HEIMAN, E.,
 HEINE, JULIUS F.,
 HEINTZ, JOHN C.,
 HELME, MRS. GEO. A.,
 HENCKEN, HANCKE,
 HENDERSON, ALTON S., M.D.,
 *HENDERSON, E. C.,
 HENDERSON, JOHN B.,
 HENDERSON, NORMAN,

HENNESSY, JOSEPH P.,
 HENRY, FRANCIS A.,
 HEPBURN, MRS. A. BARTON,
 HERMAN, MAX,
 HERMANN, BERNARD F.,
 HERNSTADT, WM. L.,
 HERRICK, HAROLD,
 HERRMAN, MRS. HENRY S.,
 HERSH, ROYAL VALE,
 HERSHHEY, ANDREW H.,
 HERTER, CHRISTIAN A.,
 HERZOG, PAUL M.,
 HERZOG, SAMUEL A.,
 HESS, DR. ALFRED F.,
 HEWITT, MRS. LUCY W.,
 HEWITT, MISS SARAH C.,
 HEYDT, CHAS. E.,
 HICKS, E. PIERPONT,
 HICKS, JOHN M. W.,
 HICKS, MISS M. HELEN,
 *HIGBIE, JAMES S.,
 HIGGINS, MRS. CHARLES H.,
 HIGGINS, RICHARD H.,
 HIGGINSON, MRS. J. J.,
 HILL, E. B.,
 HILL, ROBERT C.,
 HILLS, DR. THOS. McD.,
 HINCKLEY, MRS. SAMUEL NIELSON,
 HINTON, ALFRED P.,
 *HIRD, SAMUEL,
 HIRSCH, CHARLES S.,
 HIRSCHLAND, FRANZ H.,
 HOCHSCHILD, H. A.,
 HODENPYL, ANTON G.,
 HODGES, HARRISON B.,
 HOE, MRS. ROBERT,
 HOFFMAN, F. B.,
 HOFFMAN, MISS M. U.,
 HOFFMAN, MRS. WILLIAM M. V.,
 HOFFMAN, W. W.,
 HOGAN, MRS. JEFFERSON,
 HOGG, KENNETH S.,
 HOLBROOK, MRS. EDWARD,
 HOLLOWBACK, MISS AMELIA B.,
 HOLLINGWORTII, DR. W. G.,
 HOLMES, CHAS. LEYLAND,
 HOLT, ROBERT S.,
 HOLTER, MRS. E. O.,
 HOLTON, CHARLES W.,
 HOLTON, OLIVER W.,
 HOMES, HENRY F.,
 HOOKER, DR. RANSOM S.,
 HOOLEY, EDWIN S.,
 HOPPIN, MISS FRANCES,
 HOPPIN, WILLIAM W., JR.,
 HORNADAY, MRS. JOSEPHINE C.,
 HORR, L. WILLIAM,

HOSKIER, H. C.,
HOUGHTON, CLEMENT S.,
HOUSMAN, CLARENCE J.,
HOWE, MRS. HELEN W.,
HOWELL, MAXWELL D.,
HOWELL, T. A.,
HOWELLS, MRS. JOHN MEAD,
HOWLAND, MRS. HENRY E.,
HOYER, F.,
HOYT, ALFRED O.,
HOYT, GEORGE S.,
HOYT, GERALD L.,
HOYT, MRS. HENRY R.,
HOYT, MRS. JESSE,
HOYT, JOHN SHERMAN,
HOYT, MISS VIRGINIA SCOTT,
HUBBARD, WALTER C.,
HUDSON, MRS. MARJORIE V. L.,
HUGHES, CHARLES E., JR.,
HUMPHREY, MISS MARTHA K.,
HUNTER, FENLEY,
HUNTINGTON, FORD,
HUNTSMAN, REV. GERARD H.,
HUPFEL, J. CHRISTIAN G.,
HURD, MRS. RICHARD M.,
HURDMAN, FREDERICK H.,
HUSSEY, FREDERICK,
HUTCHINS, AUGUSTUS SCHELL,
HUTCHINS, HARLEY D.,
HUTCHINSON, CARY T.,
HYULER, C. D.,
HYULER, F. D.,
HYDE, MRS. AUGUSTUS L.,
HYDE, B. T. BABBITT,
HYDE, COURTNEY,
HYDE, E. FRANCIS,
HYDE, DR. FREDERICK E.,
HYDE, SEYMOUR WORRALL,
ILLINGWORTH, CLARENCE,
IMBODEN, H. M., M.D.,
INGERSOLL, ERNEST,
INGERSOLL, ROBERT H.,
INSLEE, EDWIN W.,
IRONS, HENRY C.,
ISAACS, STANLEY M.,
ISELIN, MRS. ARTIUR,
ISELIN, C. OLIVER,
ISELIN, MISS GEORGINE,
ISELIN, MRS. LEWIS,
ISELIN, MISS LOUISE M.,
ISELIN, WILLIAM E.,
ISELIN, MRS. WILLIAM E.,
ISELIN, WILLIAM O'DONNELL,
ISHAM, WILLIAM B.,
ISRAEL, LEON,
JACKSON, FREDERICK W.,
JACKSON, MRS. FREDERICK W.,
JACOBS, SAMUEL K.,
JACOBUS, JOHN S.,
JAQUELIN, HERBERT T. B.,
JAFFRAY, ROBERT,
JAMES, MRS. ARTHUR CURTISS,
JAMES, HENRY, JR.,
JAMES, MRS. WALTER B.,
JAMES, MRS. WORTHAM,
JAMESON, MRS. EDWIN C.,
JARECKI, MRS. F. C.,
JENKINS, A. W.,
JENKINS, MRS. HELEN H.,
JENKINS, JOHN C.,
JENKINS, WILLIAM B.,
JENKS, ROBERT I.,
JENNINGS, SIDNEY J.,
JENNINGS, WALTER,
JESUP, MRS. JAMES R.,
JOHN, ROBERT,
JOHNES, MRS. WM. FOULKE,
JOHNSON, F. COIT,
JOHNSON, GILBERT H.,
*JOHNSON, GUY B.,
JOHNSON, THOS. W.,
JOHNSTON, J. HERBERT,
JOHNSTON, DR. MARIUS E.,
*JOHNSTON, WILLIAM J.,
JONES, MRS. A. MASON,
JONES, MRS. CADWALADER,
JONES, MRS. DWIGHT A.,
JONES, H. BOLTON,
JONES, H. LEROY,
JONES, LEWIS Q.,
JONES, WM. R.,
KAHN, FELIX E.,
KAHN, LOUIS,
KAHN, MRS. OTTO H.,
KAHN, DR. ROBERT J.,
KAHN, WALTER N.,
KALKHOFF, G. FREDERICK,
KANE, MRS. ARTHUR S.,
KANE, MRS. DELANCEY,
KARCHER, FRANK J.,
KARELSEN, EPH. A.,
KATZ, WM.,
KAUPE, ALBERT,
KEAN, HAMILTON FISH,
KEAN, MRS. HAMILTON FISH,
KEAN, ROBERT WINTHROP,
KECK, MISS MARGARET W.,
KEECH, FRANK B.,
KEECH, MRS. FRANK B.,
KEELER, MRS. C. B.,
KEIL, HENRY F.,
KELCHNER, WILLIAM W.,
KELLOGG, JOHN O.,
KELLOGG, DR. HOWARD A.,

*DECEASED

KENNEDY, EDWARD G.,
 KENNEDY, MRS. H. VAN RENNSLAER,
 KENNEDY, HENRY W.,
 KENNEDY, MRS. JOHN STEWART,
 KENNERLY, MISS M. M.,
 KENT, EDWIN C.,
 KEPHART, REV. WILLIAM H.,
 KEPPEL, DAVID,
 KETCHAM, IRVING M.,
 KEUFFEL, W. G.,
 KEYES, MRS. CHARLES W.,
 KEYSER, MRS. SAMUEL,
 KIEGER, EMIL L.,
 KIERNAN, PETER D.,
 KIMBALL, LEROY E.,
 KING, MRS. AUGUSTUS F.,
 KING, EDWARD D.,
 KING, MISS ELLEN,
 KING, MISS ETHEL,
 KING, JAMES GORE,
 KING, MRS. LEROY,
 KINGSFORD, IRVING B.,
 KINGSLEY, W. M.,
 KINKEAD, MISS JENNIE H.,
 KINNEY, WARREN,
 KINNEY, MRS. WARREN,
 KIP, W. RULOFF,
 KIRKHAM, WILLIAM B.,
 KIRKMAN, SIDNEY A.,
 KISSEL, MRS. W. THORN,
 KITTREDGE, SAMUEL DANA,
 KITZ, JOSEPH,
 KLAU, MARC,
 KLEIN, D. EMIL,
 KLEIN, MILTON M.,
 KLINGENSTEIN, CHAS.,
 KLUGMAN, J.,
 KNAPP, ARNOLD,
 KNAPP, MRS. JAMES,
 KNAPP, WM. J.,
 KNIGHT, CHARLES R.,
 KNOEDLER, ROLAND F.,
 KOHL, EDWIN PHILLIPS,
 KOLB, FRED.,
 KOLB, GEORGE C., JR.,
 KOLES, DR. HENRY M.,
 KOLISTEDE, C. A.,
 KONTA, ALEXANDER,
 KRECH, MRS. ALVIN W.,
 KREMER, MRS. WILLIAM N.,
 KUHN, AUGUST,
 KUHN, MISS BRENDA,
 KUHN, FRANK,
 KUHN, JULIUS,
 KUMPF, GEORGE L.,
 KUNHARDT, HENRY R.,
 KUNZ, GEORGE F.,
 KURSIIEDDT, ALPHONSE H.,
 KURZMAN, CHARLES C.,
 KUSER, MRS. ANTHONY R.,
 KUSER, MISS CYNTHIA G. D.,
 KUSER, JOHN DRYDEN,
 KUSER, JOHN L.,
 KUTTROFF, ADOLF,
 *KUTTROFF, FREDERICK,
 LABAR, EUGENE S.,
 LACOMBE, HON. E. HENRY,
 LADD, WM. SARGENT, M.D.,
 LAGAI, DR. GEORGE,
 LAGEMANN, C.,
 LAIENS, MRS. PHEBE P.,
 LAIMBEER, JOHN,
 LAMBERT, DR. ADRIAN V. S.,
 LAMBERT, DR. ALEXANDER,
 LAMBERT, DR. SAMUEL W.,
 LAMBERT, MRS. SAMUEL W.,
 LAMBORN, A. H.,
 LAMONT, MRS. THOMAS WILLIAM,
 LA MONTAGUE, MISS MARIE,
 LANDAUER, I. N.,
 LANDON, FRANCIS G.,
 LANE, MISS ANNIE E.,
 *LANE, EDWARD V. Z.,
 LANE, JAMES WARREN,
 LANE, WOLCOTT G.,
 LANGE, MISS CARMEN,
 LANGLOTH, MRS. VALERIA,
 LANGSTADTER, AARON,
 LANIER, MRS. JAMES F. D.,
 LAPHAM, MRS. JOHN J.,
 LATTING, CHARLES P.,
 LAUDER, MRS. GEORGE, JR.,
 LAUTEN, HENRY G. F.,
 LAUTERBACH, MRS.
 LAWRENCE, EMLEN N.,
 LAWRENCE, JOHN BURLING,
 LAWRENCE, JOHN L.,
 LAWRENCE, R. WARREN,
 LAWRENCE, TOWNSEND,
 LAWRENCE, W. V.,
 LAWSON, ARTHUR M.,
 LEA, CHARLES M.,
 LEACH, HENRY GODDARD,
 LEAVENS, MARVIN H.,
 LEDLIE, GEORGE,
 LEDOUX, DR. ALBERT R.,
 LEDYARD, MRS. LEWIS C.,
 LEE, MRS. FREDERIC S.,
 LEE, SAMUEL,
 LEFFERTS, MARSHALL C.,
 LEFKOVICS, MRS. JULIET,
 LEGG, GEORGE,
 LEGGETT, WARREN F.,
 LEHMAIER, JAMES M.,

LEHMAN, HAROLD M.,
 LEONARD, MRS. H. WARD,
 LEONHARD, J. HENRY,
 LEROY, EDWARD A.,
 LESLIE, J. C.,
 LESTER, A. EDWARD,
 LESTER, GEORGE BACON,
 LESTER, HENRY M.,
 LEUPP, WILLIAM H.,
 LEVEY, MRS. PHILLIP B.,
 LEVY, LOUIS S.,
 LEWIS, MRS. AUGUST,
 LEWIS, MRS. F. E.,
 LEWIS, MISS MARY FREDERICA,
 LEWIS, DR. WILLIAM J.,
 LEWISOHN, ADOLPH,
 LEWISOHN, SAM A.,
 LICHTENSTEIN, OSCAR R.,
 LIEB, CHARLES C.,
 LIEB, J. W.,
 LINCOLN, FREDERIC W.,
 LISSAUER, ROBERT,
 LISSBERGER, MILTON L.,
 LITCHFIELD, E. HUBERT,
 LITCHFIELD, EDWARD H.,
 LITTAUER, SIEGFRIED,
 LITTLEFIELD, CAPT. CHARLES W.,
 LIVERMORE, MRS. JOHN R.,
 LIVINGSTON, MISS ANNA P.,
 LIVINGSTON, EDWARD DE P.,
 LOBENSTINE, MRS. WM. C.,
 LOCKE, MRS. MABEL DUNHAM,
 *LOEB, HERMAN A.,
 LOEWI, HUGO V.,
 LOGAN, MISS FLORENCE L.,
 *LOINES, RUSSELL H.,
 LOOMIS, GUY,
 LORD, MISS E. C.,
 LORSCH, HENRY,
 LOUNSBERRY, MISS ALICE,
 LOVELAND, ALFRED E.,
 LOW, ETHELBERT IDE,
 LOW, WILLIAM GILMAN, JR.,
 LOW, SETH,
 LOWELL, JAMES B.,
 LOWTHER, CHRISTOPHER M.,
 LUDINGTON, C. H.,
 LUDLAM, MALCOLM C.,
 LUDLOW, MRS. BANYER,
 LUDLUM, C. A.,
 LUEDER, C. G.,
 LUEDER, E. L.,
 LUKE, ADAM K.,
 LUKE, DAVID L.,
 LUSK, PROF. GRAHAM,
 LUTKINS, CLINTON S.,
 LYBRAND, WILLIAM M.,

LYMAN, FRANK,
 LYMAN, MISS GRACE GREENLEAF,
 LYMAN, THEODORE,
 McALPIN, MRS. CHARLES W.,
 McALPIN, DR. D. H.,
 McALPIN, MRS. D. HUNTER, JR.,
 *McALPIN, GEORGE L.,
 McALPIN, DR. K. R.,
 McBRIDE, MRS. HERBERT,
 McCARE, T. T.,
 McCAGG, LOUIS B.,
 McCALL, RICHARD,
 MCCARTER, GEORGE W. C.,
 MCCOY, J. C.,
 McCREA, W. S.,
 MCCREERY, HENRY FORBES,
 MCCREERY, MRS. HENRY FORBES,
 McCULLOH, J. S.,
 McCREW, PAUL,
 McCREW, MRS. PAUL,
 McFARLIN, W. K.,
 McGUSTY, MRS. ROBERT T.,
 McILHENNY, EDWARD A.,
 MCKAY, MRS. ROBERT,
 MCKAY, ROBERT GORDON,
 MCKELVEY, J. J.,
 MCKELVEY, ROBERT,
 MCKIM, JOHN A.,
 MCKIM, LEROY,
 McLANE, THOMAS S.,
 *MCLEAN, MISS ETHEL L.,
 MCLEAN, MARSHALL,
 McMANUS, EDWARD F.,
 McMILLAN, FRANCIS W.,
 McNAIR, WILLIAM,
 MAAS, MILTON A.,
 MACENULTY, J. F.,
 MACFADDEN, C. K.,
 MACFARLANE, WALLACE,
 MACK, ARTHUR C.,
 *MADDEN, J. E.,
 MAGEE, JOHN,
 MAGER, F. ROBERT,
 MAGNUS, MISS HELAINE,
 MALI, PIERRE,
 MALI, MRS. PIERRE,
 MALLORY, ROBERT, JR.,
 MALONE, L. WM.,
 MANN, GEORGE W.,
 MANN, MRS. GEORGE W.,
 MANSFIELD, HOWARD,
 MAPES, EUGENE E.,
 MARCKWALD, ALBERT H.,
 MARCUSE, ALEXANDER J.,
 MARESI, POMPEO M.,
 MARIENHOFF, MISS BETH,
 MARKHAM, ROBERT D.,

*DECEASED

MARKLE, JOHN,
 MARKOE, HARRY,
 MARQUAND, MRS. HENRY,
 MARSH, CHARLES CAPRON,
 MARSHALL, A. W. W.,
 MARSHALL, CHARLES C.,
 MARSTON, HUNTER S.,
 MARSTON, PIERCE,
 MARTIN, BRADLEY, JR.,
 MARTIN, MRS. GRINNELL,
 MARTIN, MRS. HOWARD TOWNSEND,
 MARTIN, MRS. SHELTON E.,
 MARTIN, DR. WALTON,
 MARVIN, MRS. LANGDON P.,
 MARYE, R. V.,
 MASTEN, ARTHUR H.,
 MASTERS, FRANCIS R.,
 MATHER, SAMUEL,
 MATHESON, MRS. W. J.,
 MATZKE, ADOLPH,
 MAXWELL, GEORGE T.,
 MAXWELL, HOWARD W.,
 MAXWELL, WILLIAM,
 MAYER, B.,
 MAYER, EUGENE,
 MAYER, JOSEPH B.,
 MAYER, ROSALYNDE DE LIMA,
 MAYNARD, MRS. WALTER E.,
 MEAD, MRS. WINTER,
 MEEKER, HENRY E.,
 MEHL, HENRY,
 MEINHARD, MORTON H.,
 MELLON, E. P.,
 MELLON, MRS. E. P.,
 MELOY, ANDREW D.,
 MESEROE, FREDERICK H.,
 MESSENGER, MISS MARIA GERARD,
 METCALFE, HENRY,
 MEYER, CHARLES G.,
 MEYER, MRS. CHARLES G.,
 MEYER, EUGENE, JR.,
 MEYER, DR. GEORGE W.,
 MEYER, MISS HELOISE.
 MEYROWITZ, EMIL B.,
 MICHALIS, CLARENCE G.,
 MICHALIS, MRS. CLARENCE G.,
 MIDDLEBROOK, FREDERICK,
 MILBURN, JOHN G.,
 MILLER, MRS. CHARLES E.,
 *MILLER, CHARLES O., JR.,
 MILLER, MRS. ELIZABETH C. T.,
 MILLER, W. W.,
 MILLET, S. C.,
 MILLHISER, MRS. CLARENCE,
 MILLIKEN, MRS. GERRISH H.,
 MILLS, ABRAHAM G.,
 MILLS, ANDREW,
 MILLS, FREDERIC C.,
 MILMINE, C. E.,
 MITCHELL, CHARLES E.,
 MITCHELL, MRS. WALTER L.,
 MONTGOMERY, CARLETON,
 MONTGOMERY, ROBERT H.,
 MOORE, MRS. BARRINGTON,
 MOORE, CASIMIR DER.,
 MOORE, MRS. CASIMIR DER.,
 MOORE, MISS K. T.,
 MOORHEAD, HORACE R.,
 MORAWETZ, VICTOR,
 MORDEN, WM. J.,
 MOREHEAD, JOHN M.,
 MORGAN, MISS ANNE,
 MORGAN, MISS C. L.,
 MORGAN, EDWIN D.,
 MORGAN, MRS. J. B.,
 MORGAN, MRS. JUDSON,
 MORGAN, JUNIUS S.,
 MORGAN, JUNIUS S., JR.,
 MORGAN, MRS. PIERPONT,
 MORGAN, WILLIAM FELLOWES,
 MORGAN, WILLIAM FORBES, JR.,
 MORGENTHAU, M. L.,
 MORRIS, DAVE H.,
 MORRIS, MRS. FORDHAM,
 MORRIS, MRS. LEWIS RUTHERFURD,
 MORRIS, LEWIS SPENCER,
 MORRISON, MRS. CHARLES KING,
 MORRISON, N. H.,
 MORSE, HOWARD M.,
 MOSENTHAL, PHILIP J.,
 MOSLE, A. HENRY,
 MOSMAN, PHILIP A.,
 MOTLEY, JAS. M.,
 MOTT, HENRY C.,
 MOTT, MRS. JOHN BOWNE,
 MOYER, ALBERT,
 MUELLER, CHARLES F.,
 MUHLFELD, FRANK J.,
 MULFORD, EDWIN H.,
 MULLER, CARL,
 MUNN, CHARLES A.,
 MUNSEY, FRANK A.,
 MURGATROYD, JOHN,
 MURPHY, MRS. FELIX TONE,
 MURPHY, GRAYSON, M. P.,
 MURTHA, THOMAS F.,
 MUSCHENHEIM, FREDERICK A.,
 MYERS, MRS. CLARE FLORENCE,
 MYERS, FRANK J.,
 MYERS, GEORGE S.,
 MYERS, WILLIAM S.,
 NADAL, MRS. CHAS. C.,
 NADELMAN, MME. ELIE,
 NAUMBURG, GEORGE W.,

NEILSON, DR. HOWARD S.,
 NEILSON, WALLACE PLATT,
 NELLES, HUGO C.,
 NELSON, JAMES W.,
 NESMITH, JAMES,
 NEUMOEGEN, M. L.,
 NEUMOEGEN, MRS. M. L.,
 NEUSTADT, MRS. S.,
 NEWCOMBE, MRS. CHAS. M.,
 NEWSON, WILLIAM M.,
 NEWTON, F. MAURICE,
 NICHOLS, ACOSTA,
 NICHOLS, MRS. GEORGE,
 NICHOLS, MRS. JOHN W. T.,
 NICKERSON, HOFFMAN,
 NICOLL, MRS. BENJAMIN,
 NISBETT, DR. J. DOUGLAS,
 NOLAN, MRS. JOHN HUGH,
 NORMAN, EDWARD A.,
 NORMAN, MRS. BRADFORD,
 *NORRIE, MISS MARY,
 NORTH, GEORGE B.,
 NORTON, MRS. JEAN C.,
 NOTMAN, GEORGE,
 NOTMAN, HOWARD,
 OAKES, GEORGE W. OCHS,
 OBERMAYER, CHARLES J.,
 O'BRIEN, PERCY J.,
 OCHS, ADOLPH S.,
 O'CONNELL, DR. J. H.,
 O'CONOR, JOHN C.,
 O'DONOHOUE, MISS TERESA R.,
 OFFERMAN, JOHN,
 OGDEN, CHARLES W.,
 OGDEN, DAVID B.,
 OGDEN, MISS MARY F.,
 OGLE, MRS. PONSONBY,
 OHMEIS, JOHN,
 OHMEIS, P. M.,
 OLcott, DUDLEY,
 OLcott, E. E.,
 OLIN, MRS. STEPHEN H.,
 OLNEY, ELAM WARD,
 OLYPHANT, ROBERT,
 ONATIVIA, J. VICTOR,
 OPENHYNM, GEORGE J.,
 OPPENHEIMER, DAVID E.,
 ORDWAY, SAMUEL H.,
 O'REILLY, THOMAS J.,
 O'Rourke, MRS. P. F.,
 ORVIS, MRS. WARNER DAYTON,
 ORVIS, WARNER DAYTON,
 ORTH, CHARLES D., SR.,
 OTHEMAN, MRS. FRANCES W.,
 OTIS, MRS. GEORGE, L.,
 OTIS, DR. WALTER J.,
 OTTINGER, MARX,

OUTERBRIDGE, MRS. ADOLPH J.,
 OVERTON, CLOUGH C.,
 OVINGTON, CHARLES K.,
 PACKARD, MRS. E. WINSLOW,
 PACKARD, JOHN H.,
 PADDOCK, MRS. EUGENE H.,
 PADDOCK, MRS. ROBERT L.,
 PAGE, CECIL,
 PAINE, MRS. AUGUSTUS G.,
 PAINTER, DR. H. McM.,
 PALMER, EDGAR,
 PALMER, HOWARD,
 PALMER, DR. T. S.,
 PARDOE, DR. J. B.,
 PARISH, MRS. EDWARD C.,
 PARISH, WAINWRIGHT,
 PARKER, A. W.,
 PARKER, EDWARD LUDLOW,
 PARKER, JUNIUS,
 PARKER, WINTHROP,
 PARKS, ELTON,
 PARSONS, CHARLES W.,
 PARSONS, MISS GERTRUDE,
 PARSONS, HERBERT,
 *PARSONS, MRS. JOHN E.,
 PARSONS, MISS MARY,
 PARSONS, WILLIAM BARCLAY,
 PARTRIDGE, DR. EDWARD L.,
 PATON, DAVID,
 PATTERSON, HENRY STUART,
 PATTERSON, T. H. HOGE,
 *PATTERSON, WILLIAM F.,
 PAUL, JOHN GILE,
 PAULDING, CHARLES C.,
 PAYNE, FREDERICK HUFF,
 PAYNE, MRS. HENRY W.,
 PEABODY, STEPHEN,
 PEACOCK, MRS. CHARLES A.,
 PEAKE, WM. W.,
 PEARSON, MRS. FREDEICK,
 PECK, CHARLES E.,
 PECK, DR. CHAS. H.,
 PECK, MORTON R., M.D.,
 PECKHAM, MRS. WHEELER H.,
 PELL, JAMES D.,
 PENDLETON, FRANCIS KEY,
 PENFOLD, EDMUND,
 PENROSE, DR. CHARLES B.,
 PERINE, WILLIAM DE NYSE,
 PERKINS, MRS. CHARLES ALBERT,
 PERKINS, MRS. GEORGE W.,
 PERKINS, GEORGE W., JR.,
 PERKINS, MISS HATTIE W.,
 PERKINS, ROBERT P.,
 PERRY, MRS. WILLIAM A.,
 PETERS, MRS. CHARLES G.,
 PETERS, THEODORE,

*DECEASED

PETERS, WILLIAM RICHMOND,
 PETERSON, W.M.,
 PETRASCI, CARL S.,
 PFEIFFER, GEORGE,
 PFORZHEIMER, CARL H.,
 PFORZHEIMER, WALTER,
 PHIELPS, MRS. ANSEL,
 PHIELPS, DR. GOVERNEUR M.,
 PIATTI, DR. VIRGIL C.,
 PICKHARDT, CARL,
 PICKHARDT, W. P.,
 PIERREPONT, MISS ANNA JAY,
 PIERREPONT, R. STUYVESANT,
 PIERNON, GEN. J. FRED,
 PINCHOT, GIFFORD,
 PIRIE, S. C.,
 PITNEY, MRS. J. O. H.,
 PLACE, IRA A.,
 PLATT, HENRY B.,
 PLATT, LIVINGSTON,
 POLING, JAMES A.,
 POLK, FRANK L.,
 POLLITZER, DR. S.,
 POMEROY, DANIEL E.,
 POMROY, H. K.,
 POND, MISS FLORENCE L.,
 POOR, HENRY V.,
 POOR, ROGER M.,
 POPE, G. D.,
 POPE, MRS. JAMES E.,
 PORTER, ALEXANDER J.,
 PORTER, LOUIS H.,
 POST, ABRAM S.,
 POST, MRS. CHARLES ALFRED,
 POST, GEORGE B.,
 POTTER, MISS BLANCHE,
 *POTTER, FREDERICK,
 POTTER, FULLER,
 POTTER, J. W. FALLER,
 POTTER, R. BURNSIDE,
 POTTER, SAMUEL B.,
 POTTS, CHARLES E.,
 POTTS, WILLIAM BREVOORT,
 POWELL, STEPHEN A.,
 POWERS, MRS. JOHN C.,
 *PRATT, MRS. GEORGE DU PONT,
 PRATT, MRS. HAROLD,
 PRATT, H. L.,
 PRATT, JOHN T.,
 PRATT, MRS. JOHN T.,
 PRENTICE, JOHN HILL,
 PRENTISS, MISS HENRIETTA,
 PRESCOTT, SHERBURNE,
 PRESTON, VERYL,
 PRIDDY, LAWRENCE,
 *PRIME, MISS CORNELIA,
 PRINCE, EDWARD S.,
 PRINCE, LEO M.,
 PROCTOR, MRS. L. SANFORD,
 PROCTOR, WILLIAM,
 PROCTOR, MRS. CHARLES E.,
 PROCTOR, MRS. MARIA W.,
 PROCTOR, WM. ROSS,
 PULSIFER, HAROLD TROWBRIDGE,
 PULITZER, MRS. JOSEPH,
 PUTNAM, IRVING,
 PUTNEY, MISS EVA C.,
 PYLE, D. H. McALPIN,
 PYLE, JAMES McALPIN,
 PYLE, MRS. JAMES TOLMAN,
 PYNE, MEREDITH H.,
 PYNE, MRS. M. TAYLOR,
 PYNE, MRS. PERCY R.,
 QUINBY, HON. HENRY BREWER,
 QUINCY, CHARLES F.,
 QUINTARD, DR. EDWARD,
 RAISLER, SAMUEL,
 RANDOLPH, WILLIAM W.,
 RANGER, STANLEY,
 *RASMUS, W.,
 RASMUS, W. T.,
 RATHBORNE, RICHARD C.,
 RAVNER, WILLIAM,
 RAYMOND, H. E.,
 READ, MRS. WILLIAM A.,
 READ, WM. A., JR.,
 REDMOND, MISS E.,
 REDMOND, MRS. HENRY S.,
 REED, ALDEN,
 REED, MISS BERTHA M.,
 REED, MRS. CHESTER T.,
 REED, ROBERT R.,
 REEDS, CHESTER A.,
 REEVES, MARK W.,
 REID, OGDEN MILLS,
 REID, MRS. OGDEN MILLS,
 REID, WALLACE,
 REID, MRS. WHITELAW,
 REISCHMAN, HENRY R.,
 REISINGER, CURT. H.,
 REMINGTON, FRANKLIN,
 REMINGTON, SETH P.,
 REMSEN, LESTER C.,
 RENNIE, ROBERT,
 RENNULT, WILLIAM,
 RENWICK, EDWARD BREVOORT,
 REYNAL, MRS. E. S.,
 REYNOLDS, R. C.,
 REYNOLDS, THOMAS A.,
 RHEINAUER, DANIEL,
 RICE, C. H.,
 RICE, MRS. WILLIAM L.,
 RICHARD, EDWIN A.,
 RICHARD, MISS ELVINE.

RICHARD, OSCAR L.,
 RICHARDS, MISS CLARA,
 RICHARDS, ELLIS G.,
 RICHARDS, E. O.,
 RICHARDS, MISS HELEN,
 RICHARDSON, MRS. C. TIFFANY,
 RICHARDSON, ERNEST,
 RICHARDSON, JOSEPH W.,
 RICHARDSON, SINCLAIR,
 RIEM, SIMON R.,
 RIGGS, GEO. C.,
 RIGHITER, MISS HARRIET T.,
 RIKER, MRS. CHARLES L.,
 RIKER, WM. J.,
 RIPLEY, JULIAN A.,
 RIPPE, MRS. E. J.,
 ROBB, MRS. N. THAYER,
 ROBBINS, CHANDLER,
 ROBERTS, MRS. CHAS. HENRY,
 ROBERTS, D. DUDLEY,
 ROBERTS, IRVING BRUCE,
 ROBERTS, OWEN F.,
 ROBERTS, THOMAS S.,
 ROBERTSON, L. J.,
 ROBINSON, MRS. C. BONNYCASTLE,
 ROBINSON, MRS. DOUGLAS,
 ROBINSON, EDWARD,
 ROBINSON, JOHN A., M.D.,
 ROBINSON, MONROE D.,
 ROBINSON, MRS. MONROE D.,
 ROBINSON, MISS PAULINE,
 ROCHE, MRS. BURKE,
 ROCKEFELLER, MRS. J. D., JR.,
 ROCKEFELLER, MRS. WILLIAM G.,
 *ROE, MAJ.-GEN. CHARLES F.,
 ROE, FRANK O.,
 ROE, IRVING L.,
 ROGER, JOHN,
 ROGERS, CHAS. F.,
 ROGERS, FRANCIS,
 ROGERS, MRS. FRANCIS,
 ROGERS, G. VERNOR,
 ROGERS, HUBERT E.,
 ROKENBAUGH, HENRY S.,
 ROLBIECKI, REV. DR. JOHN J.,
 ROLLE, AUGUSTUS J.,
 ROLLINS, FRANK S.,
 ROMBOUGH, JOHN B.,
 RONALDS, MISS THORA SCOTT,
 ROOF, CLARENCE M.,
 ROOSEVELT, MRS. HILBORNE L.,
 ROOSEVELT, MRS. JAMES,
 ROOSEVELT, W. EMLEN,
 ROOT, ELIHU,
 ROSE, MRS. A. SUMNER,
 ROSENTHAL, SYLVAN E.,
 ROSSITER, LUCIUS T.,
 ROTH, J. E.,
 ROTIBARTH, ALBERT,
 ROTHWELL, JAMES E.,
 ROUND, A. C.,
 ROUNDS, R. S., JR.,
 ROWLAND, THOMAS,
 ROWLEY, CHARLES BUCHANAN,
 RUHE, LOUIS,
 RUIIL, LOUIS,
 RUMSEY, MRS. CHARLES CARY,
 RUNYON, E. W.,
 RUNYON, WALTER CLARK,
 RUPERTI, MISS IDA A.,
 RUPERTI, JUSTUS,
 RUPPERT, MRS. JACOB,
 RUPPRECHT, FREDERICK K.,
 RUSSELL, DR. JOHN F.,
 RUST, HAROLD N.,
 RYAN, JOHN BARRY,
 RYAN, MRS. THOMAS F.,
 RYLE, ARTHUR,
 RYLE, GRAHAM,
 RYLE, MISS JULIA,
 SACKETT, MRS. CHAS. A.,
 SACKETT, MISS HELEN H.,
 SAGE, DEAN,
 SAGE, JOHN H.,
 SAMPSON, CHARLES E.,
 SAND, MISS ALICE L.,
 SANDALGI, REV. PAUL J.,
 SANDHAGEN, H.,
 SANDS, MISS ANNE A.,
 SANDS, MRS. BENJAMIN AYMAR,
 SANDS, MRS. JAMES,
 SARG, F. A.,
 SARGENT, HENRY B.,
 SARTER, MISS EMILIE L.,
 SATTERWIITE, PRESTON P.,
 SAUTER, FRED.,
 SAWYER, MRS. EDWARD,
 SCARBURGH, ROBERT S.,
 SCHALL, W.,
 SCHAUER, C. F.,
 SCHAUFLER, MRS. A. F.,
 SCHIEFER, ANTON H.,
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CHARTER
OF THE
New York Zoological Society

CHAPTER 435, LAWS OF 1895.

AN ACT to incorporate the New York Zoological Society and to provide for the establishment of a zoological garden in the city of New York.

As amended by Chapter 146 of the Laws of 1902; and by Chapter 240 of the Laws of 1910.

See Chapter 432 of the Laws of 1900.

See Chapter of the city of New York, Section 626 of the Laws of 1901.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Charles A. Dana, Oswald Ottendorfer, Andrew H. Green, William H. Webb, Henry H. Cook, Samuel D. Babcock, Charles R. Miller, George G. Haven, J. Hampden Robb, Frederick W. DeVoe, J. Seaver Page, Rush C. Hawkins, David James King, Wager Swayne, Charles A. Peabody, Jr., Charles E. Whitehead, Charles R. Flint, Samuel Parsons, Jr., Mornay Williams, Henry E. Gregory, Isaac W. Maclay, Isaac Rosenwald, Hugh N. Camp, Andrew D. Parker, Cornelius Van Cott, William F. Havemeyer, Frederick Shonnard, William W. Thompson, Alexander Hadden, Edward L. Owen, John H. Starin, Rush S. Huidekoper, William W. Goodrich, Albert H. Gallatin, Frederick S. Church, Edward C. Spitzka, Robert L. Niles, Madison Grant, C. Grant La Farge, William Van Valkenburg, and such other persons as may, under the provisions of its by-laws, become members of the corporation hereby created, are hereby created a body corporate and politic, by and under the name of New York Zoological Society.

SEC. 2. Said corporation shall have power to establish, maintain and control zoological parks, gardens, or other collections for the promotion of zoology and kindred subjects, and for the instruction and recreation of the people. Said corporation may collect, hold, and expend funds for zoological research and publication, for the protection of wild animal life, and for kindred purposes, and may promote, form, and co-operate with other associations with similar purposes, and may purchase, sell, or exchange animals, plants, and specimens appropriate to the objects for which it was created.

SEC. 3. The managers of said corporation shall have power to make and adopt by-laws for the management and government of its affairs and business, for the admission, suspension, and expulsion of its members, and for the terms and conditions of membership; to prescribe the number and mode of election of its officers; to define their duties; to provide for the safe-keeping of its property, and from time to time to alter and modify its By-laws.

SEC. 4. The affairs and business of said corporation shall be managed and controlled by a board of managers, the number of whom shall be prescribed by the by-laws. The first board of managers shall be divided by lot into three classes, equal in number, one of which classes shall hold office for one year, another for two years, and the other for three years; and all persons elected to be managers at any subsequent election shall hold office for three years, and until others are elected in their stead. There shall be a president, two vice-presidents, treasurer and secretary, to be elected by the board of managers annually, who shall hold office until others are elected in their stead. The first meeting under this act may be held at any time upon a notice of five days, signed by any five of the incorporators named in the first section of this act, fixing a time and place for such meeting, a copy whereof shall be mailed to each of said incorporators at his usual post-office address, and twelve of such incorporators shall be a quorum for the purpose of organization, adoption of by-laws, and election of officers. No manager of said corporation shall be interested, directly or indirectly, in any contract concerning its property or affairs.

SEC. 5. Said corporation may raise money by the issue of bonds, secured by a mortgage on any or all of its property not acquired from said city or state.

SEC. 6. Said corporation may take, purchase, and hold real and personal estate necessary for the purpose of its incorporation, and shall possess the general powers and be subject to the restrictions and liabilities prescribed in Article II of Chapter 23 of the Consolidated Laws, entitled "General Corporation Law," being chapter 28 of the Laws of 1909.

SEC. 7. The commissioners of the sinking fund of the said city are authorized in their discretion to allot, set apart, and appropriate for the use of said corporation, any of the lands belonging to said city north of One Hundred and Fifty-fifth Street, but not in the Central Park, and such appropriation may be revoked if, after the expiration of five years from the passage of the act, a zoological garden is not established thereon; said grounds thus set apart and appropriated shall be used or no purpose whatsoever except those aforesaid. As soon as any lands are set apart the Mayor of the said city of New York, and the President of the Department of Parks of said city, shall become and be *ex-officio* members of the board of managers of said corporation. If at any time the animals now composing the menagerie of Central Park shall be removed therefrom by the authorities having charge thereof, said authorities may make an arrangement with the incorporators named in this act or the corporation formed by them for leasing or sale of such animals to such incorporators or corporation, and said incorporators or corporation shall have a preference over any other person or corporation in respect thereto upon the same terms which said authorities could make with any such other person or corporation, or upon such other terms as to such authorities may seem proper, but nothing herein provided shall be construed as giving the commissioners of the Department of Public Parks authority to sell, lease, transfer, or in any other wise dispose of said animals or other property connected with or belonging to said menagerie.

SEC. 8. Admission to the said gardens shall be free to the public for at least four days, one of which shall be Sunday, in each week, subject to such rules and regulations as shall be prescribed by said corporation.

SEC. 9. This act shall take effect immediately.

AN ACT to amend chapter four hundred and thirty-five of the laws of eighteen hundred and ninety-five, entitled "An act to incorporate the New York Zoological Society and to provide for the establishment of a zoological garden in the City of New York" in relation to real and other property.

Became a law May 26, 1917, with the approval of the Governor. Passed, three-fifths being present.

ACCEPTED BY THE CITY.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Chapter four hundred and thirty-five of the laws of eighteen hundred and ninety-five, entitled "An act to incorporate the New York Zoological Society and to provide for the establishment of a zoological garden in the City of New York," as amended by chapter two hundred and forty of the laws of nineteen hundred and ten, is hereby further amended by adding thereto a new section to read as follows:

7-a. The board of estimate and apportionment in the City of New York may, in its discretion, set apart and appropriate upon such conditions as it may deem expedient for the extension and development of the work and objects of the said New York Zoological Society, the whole or any part of that portion of Bronx Park in the City of New York, lying to the south of Pelham avenue and Pelham parkway, for the use of the said New York Zoological Society, the said lands so to be appropriated to be described particularly in the order of the board of estimate and apportionment hereby authorized. The said board of estimate and apportionment may also, in its discretion at the time of setting apart and appropriating said lands or any part thereof to the New York Zoological Society, and annually thereafter, in addition to any sum or sums which it may have appropriated for the support and maintenance of the New York Zoological Park, appropriate to the use of said society, such sum or sums in its discretion for the care and maintenance of the additional lands that may be allotted to the said society under the authority hereby conferred, as it may deem best.

2. This act shall take effect immediately.

New York Zoological Society

AND THE

New York Aquarium

CHAPTER 441, LAWS OF 1902.

AN ACT to authorize a further appropriation to the New York Zoological Society for the support of the New York Aquarium.

As amended by Chapter 239 of the Laws of 1910.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Chapter four hundred and forty-one of the laws of nineteen hundred and two, entitled "An Act to authorize a further appropriation to the New York Zoological Society for the support of the New York Aquarium," is hereby amended to read as follows:

SECTION 1. The Board of Estimate and Apportionment of the City of New York may annually, in its discretion include in the budget for the then next ensuing financial year, in addition to any sum or sums which may be appropriated for the adequate support and maintenance of the New York Zoological Park or gardens, situated in the borough of the Bronx, and administered and controlled by the New York Zoological Society, a further sum or sums, in its discretion, for the use of the said New York Zoological Society, provided, however, that the additional appropriation hereby authorized shall be made only in case an agreement is entered into between the said New York Zoological Society and the City of New York, acting by its Board of Estimate and Apportionment for the adequate keeping, maintenance, extension, preservation and exhibition of the building and approaches thereto and collection of aquatic animals and plants contained therein, known as the New York Aquarium, situated in the Battery Park in the Borough of Manhattan in said city, and also for furnishing opportunities for study, research and publication in connection with said collections, which contract the said Board of Estimate and Apportionment is hereby expressly authorized, in its discretion, to make upon such terms and conditions as may be agreed upon with the said New York Zoological Society, and which contract shall also provide how the duty of the commissioner of parks for the borough of Manhattan and Richmond in respect to maintaining the said aquarium now imposed upon him by law shall be performed.

SEC. 2. This act shall take effect immediately.

GRANT OF SOUTH BRONX PARK

TO THE

New York Zoological Society

At a special meeting of the Commissioners of the Sinking Fund, City of New York, held on March 24, 1897, a resolution was passed allotting South Bronx Park for the use of the New York Zoological Society upon conditions entirely satisfactory to the Society.

The full text of the resolution is as follows:

WHEREAS, by chapter 435 of the Laws of 1895, entitled "An act to incorporate the New York Zoological Society and to provide for the establishment of a Zoological Garden in the City of New York," it is provided that the Commissioners of the Sinking Fund of the City of New York are authorized in their discretion to allot, set apart and appropriate, for the use of said corporation, any of the lands belonging to said city north of 155th Street, but not in Central Park,

RESOLVED, that the said Commissioners of the Sinking Fund do hereby allot, set apart and appropriate for the use of said corporation, a tract of land in the southern portion of Bronx Park, embracing an area of about 261 acres, and consisting of so much of said park as lies south of Pelham Avenue, upon the following terms and conditions, to wit:

First. That said grounds thus set apart and appropriated, shall be used for no other purpose whatsoever except for the purposes of said Zoological Garden as the same are specified in the act aforesaid, and that said appropriation of said lands hereby made shall be revoked if, after the expiration of three years from the date of the commencement of the work by the Park Department for the necessary improvement of the grounds as referred to and described in the sixth paragraph of this Resolution, a Zoological Garden is not established upon said tract of land.

Second. That the original equipment of buildings and animals for said Zoological Garden shall be paid for from funds contributed by the New York Zoological Society, and that said Society shall, before it enters into occupation of the allotted land and within one year from the date of this Resolution, raise one hundred thousand dollars by subscription, and within three years from the date of the commencement of the work by the Park Department for the necessary improvement of the grounds as referred to and described in the sixth paragraph of this Resolution, the further sum of at least one hundred and fifty thousand dollars. If the said Society shall fail or neglect to raise said funds within the periods respectively fixed therefor, it shall, on demand of the Commissioners of the Sinking Fund, surrender to the City of New York the land allotted to it as

a site for said Garden, and all improvements made thereon. The said Society shall not mortgage its buildings or animals, or any of its property within said Garden, which is directly or indirectly maintained by the City of New York.

Third. The said Zoological Society shall have the power to establish an endowment fund from the donations and bequests, which fund shall be used solely, unless otherwise specified by the donors thereof, for the general uses and purposes of said Society. The funds of said Society, other than the sums contributed to said endowment fund, shall be expended upon buildings and other enclosures for animals, for the collections of animals, and for the general purposes of the Society. Among the funds thus to be expended shall be the subscriptions of members, life members and patrons, and all cash donations to said Society, other than those made for the purposes of the endowment fund, and all moneys derived from the sale of animals; and the net proceeds of the privileges that may be developed in said Garden, such as refreshments, boating, riding animals, the sale of photographs, etc., shall be used for, and expended in the increase of the collections; and payments from the funds of such Society, including the endowment fund, shall be made directly from the treasury of the Society.

Fourth. The library, pictures, maps, office furniture, and other movable property purchased and owned by the Society shall remain the property of the Society, and excepting living animals, may be removable at will, and every piece of such property shall bear a distinguishing mark. But no buildings, aviaries or cages may be sold or removed by said Society without the written consent of the Board of Parks. All property paid for from the maintenance fund, hereinafter referred to, shall belong to the City.

Fifth. So long as the said Society is entrusted with the control and management of the said Zoological Garden, and the city provides for the proper maintenance and care of the animals and collections therein, the said Society shall not remove any of its animals or collections for exhibition elsewhere without the consent of the Board of Parks, but if the City shall ever cease to provide for the proper maintenance and care of the said animals and collections, the said Zoological Society shall have the right, upon giving three months' notice in writing to the Board of Parks, to remove the said animals and collections owned by it. The said Society shall have the right to improve its collections by the exchange of animals, and also by the sale of animals not needed for exhibition; but all moneys derived from such sale or exchange of animals shall be used only for the purpose of increasing said collections.

Sixth. The City of New York shall annually provide the necessary funds for the maintenance and care of the Zoological Garden, its buildings, inclosures and other improvements made from time to time therein, and the animals and collections of said Society; but the appropriation for the first year is not to exceed Sixty thousand dollars (\$60,000). It shall be the duty of the City to provide from such sums or appropriations, as may be applicable thereto, the cost of the necessary improvement of the ground prior to the erection of buildings and inclosures, including such roads, walks, fences, grading, water supply, drainage and heating as may be or become necessary for the proper development of said Zoological Garden, all of which work of preparation and construction shall be performed in conformity with the plans therefor to be agreed upon between the Park Department and the Zoological Society. The said City shall also furnish the necessary supply of water, and adequate police patrol and protection, and the salaries of all persons employed directly in the service and development of the Zoological Garden shall be paid from the maintenance fund, and from such other funds as may be available for and applicable to the purpose. Payments from the maintenance fund shall be made upon vouchers filed with the Comptroller and drawn in such form as he may direct; and said Society shall annually render to the Mayor of the City of New York, a report showing all expenditures during

the year then past, made on account of the said Zoological Garden, all revenues and resources thereof, a statement of the number of the members of said Society, of the donations received and of the number of animals in the Garden, the chief items of improvement made during the year, and all other information that the said Mayor may require.

Seventh. The Park Department shall at all times have access to the grounds, buildings and other inclosures of the said Zoological Society for general police visitation and supervision, and for all other lawful purposes. Prior to the commencement of any work on said Garden the general plan therefor shall be submitted to and approved by the Park Board, and all subsequent plans for buildings, roadways and paths shall also be so submitted and approved. No living tree shall be cut down or removed, except by the express authority of said Park Department, but the said Zoological Society shall have the right to remove dead trees and such bushes as it may be necessary to remove in the preparation of inclosures for animals, or in making other improvements. The said Department of Parks shall plant such and so many shade trees, aquatic plants, shrubs and flowers as may be necessary to enhance and secure the seclusion, beauty and usefulness of the park, and shall do and perform all the work of gardening necessary to carry out the general plan of improvement and the subsequent plans as may be agreed upon between the said Zoological Society and the said Department of Parks.

Eighth. The said Zoological Garden and its collections shall be free to the public without the payment of any admission fee or gratuity whatsoever for not less than seven hours a day on at least five days of the week, one of which shall be Sunday, and also on all legal holidays and half holidays, subject to such reasonable regulations as may be made by said Society, but the said Society may close the area devoted to the collections of animals on not more than two days in each week, and on such days may charge an admission fee which shall be fixed by said Society, and all moneys derived from such admission fees shall be expended by said Society in the increase of the collections or in the improvement of said Garden or its buildings; but the portion of the grounds situated east of Boston Road, and all the Bronx River below the Boston Road bridge shall be open to the public at all times as pleasure grounds, subject to such reasonable regulations as may be adopted by said Society with the approval of the Park Department, and the occupancy of that portion of the park by herds of animals or by collections, shall be subject to the consent of the Park Department.

Ninth. The said Zoological Society shall have the right and power to appoint, direct, control and remove all persons and officers employed by them in and about the Zoological Gardens, and to fix the salaries of such persons and officers and to make promotions, but all regular employees shall be chosen, and their salaries fixed and promotions made, by reason of special fitness and ability.

Tenth. Subject to the conditions hereinbefore contained, the said Zoological Society shall exercise entire control and management over all the affairs of the said Zoological Garden.

BY-LAWS
OF THE
New York Zoological Society

AMENDED TO JANUARY 18, 1921.

ARTICLE I.

MEETINGS OF THE SOCIETY

SECTION 1. The office and place of business of the New York Zoological Society shall be in the City of New York, unless otherwise ordered.

SEC. 2. The Society shall hold its annual meeting for the election of Managers, and other business, on the second Tuesday of January, or such day thereafter during the month of January to which said annual meeting shall adjourn.

SEC. 3. Special meetings of the Society shall be called by the Secretary, upon the request of the President or the Chairman of the Executive Committee, or at the written request of ten members.

SEC. 4. Notices of all meetings shall be mailed to each member of the Society at least three days before such meeting.

SEC. 5. At meetings of the Society twenty members shall constitute a quorum.

SEC. 6. The order of business shall be as follows:

1. Roll Call.
2. Reading of minutes not previously read.
3. Report of Executive Committee.
4. Report of Secretary.
5. Report of Treasurer.
6. Report of the Director of the Zoological Park.
7. Report of Director of the Aquarium.
8. Election of Managers.
9. Communications.
10. Miscellaneous business.
11. Reports and resolutions.

ARTICLE II.

BOARD OF MANAGERS

SEC. 1. The Board of Managers shall consist of thirty-six members, together with the Mayor of New York and President of the Park Board, or Commissioner for the Bronx, who shall be members *ex-officio* of the Board.

SEC. 2. Nineteen Managers shall constitute a quorum, but ten Managers may transact current business, and adjourn, subject to the subsequent approval of a meeting at which a quorum shall be present.

SEC. 3. The Board of Managers shall hold an annual meeting on the third Tuesday of January, or on such day thereafter to which said annual meeting shall adjourn. Regular meetings of the Board may also be called by the Secretary on the third Tuesdays of October and April upon the request of the President or Chairman of the Executive Committee. Special meetings of the Board shall be called at any time by the Secretary upon the request of the President or Chairman of the Executive Committee, or at the written request of five managers.

SEC. 4. Notices of meetings of the board shall be mailed to each Manager at least three days before such meetings.

SEC. 5. The successors to the outgoing class of Managers shall be elected by the Society at its annual meeting, but vacancies in the board may be filled for the unexpired term by the Board of Managers, or by the Executive Committee.

SEC. 6. A Nominating Committee shall be annually appointed by the Executive Committee, and shall consist of three members of the Society at large, who shall nominate and post ten days before the annual election the names of twelve persons to succeed the outgoing class of Managers in a conspicuous place in the office of the Society.

SEC. 7. No person shall be eligible for the election of the Board of Managers except to fill vacancies, unless his name shall have been posted as a candidate by such committee, or by not less than ten members, in writing, in a conspicuous place in the office of the Society ten days before the annual election. All candidates for election as Managers must be Life Members, Patrons, Associate Founders, or Founders of the Society.

SEC. 8. Any Manager who shall fail to attend three consecutive meetings of the Board, unless excused by a vote of the Board, shall cease to be a Manager.

SEC. 9. The Board of Managers shall at its annual meeting elect a President, two Vice-Presidents, a Secretary, and Treasurer, who shall hold office for one year, or until their successors are elected. The President, Vice-Presidents, and Treasurer shall be members of the Board.

SEC. 10. The Director of the Zoological Park, the Director of the Aquarium, and all other persons employed by the Society, shall be appointed by the Board or by the Executive Committee, and shall hold office during the pleasure of the Board.

SEC. 11. The Board shall, at its annual meeting, elect an Executive Committee and Auditing Committee, which shall hold office for one year, or until their successors are elected. The Board of Managers and the Executive Committee shall also have authority to appoint such other Committees or officers as they may at any time deem advisable and to delegate to them such powers as may be necessary.

SEC. 12. The order of business of the meetings of the Board shall be as follows:

1. Roll Call.
2. Reading of minutes not previously read.
3. Report of Executive Committee.
4. Report of Secretary.
5. Report of Treasurer.

6. Report of Auditing Committee.
7. Report of Director of Zoological Park.
8. Report of the Director of the Aquarium.
9. Election of Officers.
10. Election of Committees.
11. Election of new members.
12. Communications.
13. Miscellaneous business.

SEC. 13. All reports and resolutions shall be in writing, and the ayes and nays may be called on any resolution at the request of one Manager.

SEC. 14. Whenever the funds of the Society shall permit, the Board of Managers or the Executive Committee may award medals or other prizes for meritorious work connected with the objects of the Society.

ARTICLE III.

OFFICERS

SEC. 1. The officers of the Society shall consist of a President, two Vice-Presidents, a Treasurer, a Secretary, and a Director of the Zoological Park. These officers, with the exception of the Director, shall be elected at the annual meeting of the Board of Managers, but any vacancy may be filled for an unexpired term by the Board of Managers, or by the Executive Committee, until the next annual election.

SEC. 2. The President shall preside at all meetings of the Board and of the Society, and shall be *ex-officio* a member of the Executive and Auditing Committees.

SEC. 3. The Vice-Presidents shall, in the absence of the President, perform his duties and possess his powers, acting in the order of their election.

SEC. 4. The Treasurer shall receive, collect and hold, subject to the order of the Board of Managers, or the Executive Committee, all dues, subscriptions, warrants from the City, fees and securities. He shall pay all bills as ordered by the Board of Managers or the Executive Committee, and shall report to the Society at its annual meeting, and to the Board of Managers at all regular meetings, and to the Executive Committee at each meeting. He shall keep all moneys and securities in some bank or trust company to be approved by the Board of Managers or Executive Committee. The books of the Society shall at all times be open to the inspection of the Managers.

SEC. 5. The Secretary shall be a salaried officer of the Society. He shall be present, unless otherwise relieved by the Board or Executive Committee, at all meetings of the Society, of the Board and of the Standing Committees. He shall keep a careful record of all proceedings, shall have the custody of the seal, archives and books, other than books of account, and shall conduct the correspondence of the Society. He shall issue all notices and tickets, and shall perform such other duties as the Board may direct. He shall be a member *ex-officio* of the Executive, Aquarium, and Auditing Committees, and of the Scientific Council.

SEC. 6. The Director of the Zoological Park shall be elected annually by the Executive Committee at a salary to be determined by said Committee, and shall hold office until removed or his successor chosen by said Committee. He shall

be the responsible administrative officer of the Park, and shall recommend to the Executive Committee candidates for the various positions in the Park. He shall also perform all such other duties in connection with the business, scientific, and literary administration of the Society as may be assigned to him by the Executive Committee.

SEC. 7. The Director of the Aquarium shall be elected annually by the Executive Committee, and shall hold office until removed or his successor is chosen by said Committee. He shall be the responsible administrative officer of the Aquarium, and shall recommend to the Executive Committee all candidates for positions in the Aquarium. The director of the Aquarium shall be *ex-officio* a member and Chairman of the Aquarium Committee. He shall perform such other duties in connection with the Aquarium as may be assigned to him by the Executive Committee.

ARTICLE IV.

COMMITTEES

SEC. 1. There shall be two standing committees, the Executive Committee and the Auditing Committee, which shall hold office for one year or until their successors are elected.

SEC. 2. The Executive Committee shall consist of eight Managers, together with the President, Secretary and Treasurer of the Society *ex-officio*. Four members including the Chairman shall constitute a quorum, and all meetings shall be called by the Chairman. The Executive Committee shall fill all vacancies in its own number and shall have the full power of the Board of Managers, except so far as such delegation of power may be contrary to law.

SEC. 3. The Executive Committee shall have the control and regulation of the collections, library, and all other property of the Society, and shall have power to purchase, sell, and exchange specimens and books, to employ and control all officials and employees of the Society, Park, and Aquarium, and generally to carry out in detail the directions of the Board of Managers and the terms of any contract between the City, or Park Board, and the Society.

SEC. 4. All the rules and regulations for the examination of applicants for the various positions in the Park and Aquarium shall be made or approved by the Executive Committee.

SEC. 5. The Executive Committee may regulate the auditing and payment for all current accounts.

SEC. 6. The Executive Committee shall annually appoint an Aquarium Committee, whose duties and powers are set forth in Section II of Article IV of these By-Laws.

SEC. 7. The Executive Committee shall annually appoint a Nominating Committee, whose duties and powers are set forth in Sections 6 and 7, Article II, of these By-Laws.

SEC. 8. It shall also appoint a Scientific Council, whose powers and duties are set forth in Section 2 of Article V of these By-Laws.

SEC. 9. The Committee shall make a written report at each regular meeting of the Board of Managers.

SEC. 10. The Auditing Committee shall consist of three regular members of the Society, in addition to the President and Secretary, members *ex-officio*, and vacancies shall be filled by the Executive Committee. It shall be the duty of

the Auditing Committee to audit, annually, the accounts of the Treasurer, of the Director of the Zoological Park, and of the Director of the Aquarium, and any other accounts of the Society, and shall report to the Board of Managers at its annual meeting.

SEC. 11. The Executive Committee shall annually appoint an Aquarium Committee, not to exceed eight members of this Society, who shall hold office until their successors are chosen. All vacancies shall be filled by the Executive Committee. The Director of the Aquarium shall be *ex-officio* a member and the Chairman of the Aquarium Committee, and such Committee may vest in him any or all of its powers. The Chairman of the Executive Committee and the Secretary of the Society shall also be *ex-officio* members of the Aquarium Committee. Three members shall constitute a quorum. The Executive Committee may delegate to the Aquarium Committee such powers as it may deem proper.

ARTICLE V.

SCIENTIFIC COUNCIL

SEC. 1. The Executive Committee shall annually appoint a Scientific Council of not more than ten members, and shall fill all vacancies. Members of the Council shall hold office until their successors are appointed.

SEC. 2. The duties of the Council shall be to act as an advisory board in all matters pertaining to the scientific administration of the Society, and especially as to the scientific features of the Park, the promotion of zoology by publications and otherwise, and the preservation of the native fauna of America.

SEC. 3. Four members, including the Chairman, shall constitute a quorum. The Chairman shall be elected annually by the Council. The Chairman of the Executive Committee and the Secretary of the Society shall be members *ex-officio* of the Council.

ARTICLE VI.

MEMBERS

SEC. 1. The present members and such others as shall become associated with them, under the conditions prescribed by the By-Laws, shall be members of this Society as long as they shall comply with the By-Laws.

SEC. 2. Members failing to comply with these By-Laws, or for other good and sufficient cause, may be expelled from the Society by the Executive Committee.

SEC. 3. Candidates for membership shall be proposed and seconded by members of the Society. The name, occupation, and place of residence of every member as proposed shall be submitted for election to the Board of Managers or the Executive Committee, and such person, when elected, shall become a member upon payment of the annual dues, or of the fees as prescribed below.

SEC. 4. There shall be a class known as Fellows, which shall consist of members of the Society who have rendered marked services to science, and shall be chosen by the Executive Committee. The privileges of Fellows shall be in all respects the same as those of regular members of the Society, but they shall be exempt from the payment of annual dues.

SEC. 5. The annual dues shall be ten dollars, payable in advance, on the first day of May of each year, but the Executive Committee may remit the dues

for the current year in the case of members elected between January 1st and May 1st of each year. The classes of membership shall be as follows:

SEC. 6. The payment of \$200 at one time shall constitute any member a Life Member.

A member who has paid annual dues for a period of five years may thereafter, at any time, upon the payment of the difference between the amount of dues already paid and \$200, become a Life Member, but such payment shall be not less than \$100.

SEC. 7. The payment of \$1,000 at one time, or in the case of a Life Member, of \$800, shall constitute any member a Patron.

SEC. 8. The payment of \$2,500 at one time, or in the case of a Patron of \$1,500, or of a Life Member of \$2,300, shall constitute any member an Associate Founder.

SEC. 9. Any member who shall donate to the Society \$5,000, or property of equal value, or any Associate Founder who shall donate \$2,500, or any Patron who shall donate \$4,000, may be elected by the Board of Managers or Executive Committee a Founder.

SEC. 10. Any member who shall have donated to the Society ten thousand dollars (\$10,000), or its equivalent, may be elected by the Board of Managers or the Executive Committee a Founder in Perpetuity. Such Founder in Perpetuity shall have the power to designate by a last will and testament his successor, who shall thereupon be entitled to all the rights and privileges of the original Founder in Perpetuity, including the right of designating in turn his successor.

SEC. 11. Any member who shall have donated to the Society \$25,000, or its equivalent, may be elected by the Board of Managers, or the Executive Committee, a Benefactor. Benefactors shall have the rights and privileges of a Founder in Perpetuity.

SEC. 12. Persons who have rendered marked service in the science of zoology or natural history may be elected Honorary Members, but not more than three such Honorary Members shall be elected in any one calendar year.

SEC. 13. A resident member who shall have rendered marked scientific or professional services to the Society in any branch of its work may be elected by the Executive Committee a Life Member, Patron, Associate Founder, or Founder. A resident of New York who shall have rendered marked service in zoology or natural history may be elected by the Executive Committee a Permanent Fellow.

SEC. 14. Non-residents who communicate valuable information to the Society, or who have rendered marked service in the science of zoology or natural history, may be elected Corresponding Members.

SEC. 15. Benefactors, Founders in Perpetuity, Founders, Associate Founders, Patrons, Life Members, Honorary Members, Permanent Fellows, Fellows, and Corresponding Members shall be exempt from annual dues.

ARTICLE VII.

PRIVILEGES OF MEMBERS

SEC. 1. A member's ticket admits the member and his immediate family to the Park on reserve days, and to all lectures and special exhibitions, and may be used by the member's immediate family, and shall be good for the current year.

SEC. 2. Admission tickets to the Park and Aquarium on reserve days are issued to members for distribution, and are good for the current year.

SEC. 3. Each member of the Society is entitled annually to a member's ticket and to ten admission tickets.

SEC. 4. Each member shall also receive one copy of the catalogue or handbook, the report and official publication of the Society, and shall have all the privileges of the Library and Members' Building.

SEC. 5. No member shall be entitled to the privileges enumerated in this Article unless his annual dues shall have been paid.

SEC. 6. The Life Members shall have all the privileges of members and ten additional admission tickets.

SEC. 7. Benefactors, Founders in Perpetuity, Founders, Associate Founders and Patrons shall have all the privileges of Life Members, and shall in addition receive copies of all scientific works published by the Society.

SEC. 8. Any member who shall fail to pay his annual dues within three months after the same shall have become due, and after notice of thirty days, by mail, shall cease to be a member of the Society; subject, however, to reinstatement by the Board of Managers or Executive Committee for good cause shown.

SEC. 9. Any person elected to membership who shall fail to qualify within three months after notice of his election shall be considered to have declined his election; but such term may be extended by the Board of Managers, or Executive Committee.

ARTICLE VIII.

FINANCES

SEC. 1. The fiscal year of the corporation shall be the calendar year commencing January 1st and ending December 31st.

SEC. 2. Neither the Society nor any of its Managers or Officers shall contract any debt which, with existing debts, shall exceed in amount the funds then in the Treasury, except to meet expenditures for which the City is liable, and for which the Society will be reimbursed by warrants from the Comptroller's office.

ARTICLE IX.

AMENDMENTS

SEC. 1. Amendments to these By-Laws may be proposed, in writing, at any meeting of the Board of Managers, and adopted by unanimous consent of the Managers present, or if such proposed amendment shall fail to receive unanimous consent, the Secretary shall, with the notices of the next meeting, send a copy of it to each Manager and state that it will be brought up for action at such meeting, when it may be passed by a majority vote.

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